Susceptibility to false memories for stereotypes and frequencies across cultures in younger and older adults

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Abstract

Fuzzy-trace theory (FTT) posits that there are two independent types of memory processing: gist and verbatim. Meaning-based, gist memory, unlike detailed, verbatim memory, is more resistant to fading over time, but this resilient type of memory can also facilitate the production of false memories. This is especially true when the items to be remembered are connected via semantic relationships, as in stereotypes, and reliance on gist memories, increases with age. We first provide an overview of FTT and the false memory phenomenon. We then present results from 2 experiments using a cued recall task tapping self-generated stereotypes for eating habits of two hypothetical people (a healthy eater and an unhealthy eater) based on the frequency of their meals. In the first experiment, we used a between-subjects manipulation of delay (either immediately tested or after 7 days) and recruited 2 age groups (18-22 or older than 55). 770 college-age and 92 older adults in the U.S. were shown 20 meals that two hypothetical people ate in the past month. We then tested participants on how many times a certain meal repeated among the 20 they studied. Probes included targets, gist-consistent distractors and gist-inconsistent distractors. This design allowed us to gather data on how false memories for self-generated stereotypes compared to true memories for each age group and how that changed with or without a delay. In our second study, we again examined the effects of delay and age with a sample of 117 college-aged (18-22) and 133 post college (23-55) participants from Brazil. Last, we ran a planned comparison of the 770 participants in the 18-22 group from the U.S. and the 133 participants from the 18-22 group from Brazil for another 2 (country) x 2 (immediate or delay) between-subjects design. In our experiments, results supported FTT's predictions: Related distractors that fit the stereotype were falsely remembered to have appeared as often as targets that were shown. This effect grew stronger with age and after a delay, such that our oldest age group, over 55 years of age, estimated stereotype-consistent distractors as having been presented multiple times and, in some cases, more often than the true targets. Our results show that self-generated stereotypes not only facilitate false memory production, but that this effect is reliable across cultures and is strengthened as one ages and with a delay between presentation and testing. These results are particularly important in a legal context, where memory is rarely tested immediately after important events and accurate memory can determine if a defendant is convicted.

David Garavito received his B.A. in Political Science and Psychology from the University of Michigan in 2015.

I dedicate this to my sister, Elizabeth.

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False memories occur when people experience recollections of events that did not occur (Brainerd & Reyna, 2005). There are several well-known experimental methods that have been used to incite false memories, including studying semantically related materials or using suggestive instructions (Loftus & Pickrell, 1995; Roediger & McDermott, 1995). However, the production of false memories is, according to a vast literature on the subject, a part of normal, everyday life (Brainerd & Reyna, 2005). Because of this, research on false memories has implications for many different fields, including law. In the fields of psychology and law, a large area of research has been done on examining false memories, especially as they affect the validity of witness testimony and suspect identification (Brainerd, 2013; Brainerd, Reyna, & Zember, 2011; Kassin, 2005). We will now explore one specific theory that explains the mechanisms behind cognitive biases, such as false memories – fuzzy-trace theory.

An Introduction to Fuzzy-trace Theory

Fuzzy-trace theory (FTT) is a theory of memory and decision making which posits that we encode information into two separate mental representations: gist and verbatim (Reyna, 2012). Gist representations contain the bottom-line meaning of information, and verbatim representations contain precise details (i.e., exact words, numbers, etc.). Per FTT, gist and verbatim representations are encoded in parallel and independently from one another (Reyna & Brainerd, 2011). That is, one representation does not depend on the other. FTT was originally developed to account for findings in the memory and decision making literature that could not be accounted for by traditional models and theories (Reyna & Brainerd, 1995). The separate but parallel processing of gist and verbatim representations has been shown in the memory literature, as well as the decision making literature (e.g., Brainerd & Gordon, 1994; Corbin, Reyna, Weldon, & Brainerd, 2015; Mills, Reyna, & Estrada, 2008; Reyna, 1992, Reyna, 1995; Reyna, 2012; Reyna & Brainerd, 1995; Reyna & Brainerd, 2005). According to FTT, although both representations are encoded simultaneously and independent of one another, reliance on these representations is not equal and can fluctuate over the lifespan. In general, adults rely on gist representations over verbatim, and when they are confronted with a decision, they use the simplest gist that is necessary and available to decide. This tendency to rely more on "fuzzy" gist representations is called the fuzzy-processing preference (Reyna, 2012).

Developmental Differences in Gist versus Verbatim Processing

The standard adult will rely primarily on gist representations over verbatim, but the same cannot be said for all decision makers of all ages. With greater age and expertise, reliance on gist representations increases dramatically, even though both analytic ability and the ability to extract semantic meaning improve with age (which improve verbatim and gist processing, respectively; Reyna & Brainerd, 1994; Reyna & Lloyd, 2006; White, Gummerum, Wood, & Hanoch, 2017; White, Gummerum, & Hanoch, 2015). In other words, younger age groups (e.g., children and adolescents) tend to rely on verbatim representations, whereas adults tend to rely more on gist representations when reasoning (Reyna, 2011). This developmental difference has been empirically shown in the decision making literature, in which children and adolescents rely on more precise analysis compared to adults, who rely on gisty, categorical contrasts (Kwak, Payne, Cohen, & Huettel, 2015; Mills et al., 2008; Reyna & Ellis, 1994; Reyna, Estrada et al., 2011). This developmental shift does not stop at adulthood, however. In normative aging, the ability to extract, retain, and subsequently access verbatim traces declines but gist representation is often maintained (Clark et al., 2012, Reyna & Brainerd, 2011; Spaan, Raaijmakers, & Jonker, 2003). This is different from those with Alzheimer's Dementia or similar clinical populations, according to FTT (Reyna & Brainerd, 2011; Brainerd & Reyna, 2015). These groups show marked declines in both the retention and retrieval of gist and verbatim information (Brainerd et al., 2014). Another population of interest is people with autism spectrum disorders. This population, according to FTT, relies heavily on verbatim processing and representations, and thus FTT makes the surprising prediction that they would be less vulnerable to intuitive (gist-based) heuristics, biases, and "errors" (e.g., false memories; Reyna & Brainerd, 2011). This prediction has been supported in the empirical literature on this population (Beversdof et al., 2000; Bowler, Gardiner, Grice, & Saavalainen, 2000; Rundblad & Annaz, 2010).

Per FTT, reliance on gist processing increases with greater expertise, so that experts and novices are comparable to adults and children, respectively, in reliance on gist (Reyna, Chick, Corbin, & Hsia, 2014; Reyna & Lloyd, 2006). There is a growing literature that has produced what may seem like counterintuitive findings – that cognitive biases and "errors" that are due to gist (e.g., risky choice framing effects, false memories) increase with age and expertise (Connell & Greene, 2016; Reyna, et al., 2014). FTT, unlike traditional theories, predicts both improvements in memory and decision making and these developmental reversals. In support of FTT's account of memory and decision making, recent research in this area used Deese-Roediger-McDermott (DRM) paradigms and found a positive relationship between susceptibility to decision making biases and susceptibility to false memories (Corbin et al., 2015). This finding lends support to FTT and the idea that a common cognitive process contributes to seemingly disparate memory and decision phenomena. The following section goes into greater depth about FTT's specific predictions about reliance on gist processing, susceptibility to false memories, and developmental effects, as well as shortcomings in the existing research.

An FTT account of False Memories

FTT can account for various psychological phenomena, including the production of false memories. This can be shown using an example with the classic DRM paradigm (Deese, 1959; Roediger & McDermott, 1995). In the DRM paradigm, participants are presented with lists of semantically-related words (e.g., shoe, ankle, step…). After presentation, participants are then shown a word and must determine whether that specific word appeared on the list. These words can be presented words (e.g., stove), distractors that were not presented but are semantically-related (e.g., foot), and distractors that were not presented and are unrelated distractors (e.g., forest). Verbatim representations contain exact details of events and, therefore, reliance on these representations would result in recollection of a true memory. Gist representations contain contextual and categorical information. Thus, reliance on gist representation may result in recognition of the correct category of a stimulus but not the stimulus itself, resulting in endorsement of distractors that are categorically-related to the stimulus (e.g., saying "yes" to oven when a list contains words like "stove" or "kitchen"; Brainerd, Reyna, Wright, & Mojardin, 2003).

The Effects of Age, Culture, and Testing Delays

Age. A large portion of the literature has been devoted to studying developmental differences in the production of false memories (Brainerd, Reyna, & Zember, 2011; Reyna et al., 2016). In classic false memory studies involving suggestive interviewing and interrogation effects, there is a well-known developmental decrease from childhood to adulthood in false memory production with age (Ceci, Ross, & Toglia, 1986; Bruck & Ceci, 1999; Bruck, Ceci, Franconeur, & Barr, 1995; Leichtman, M. D., & Ceci, S. J., 1995; McGeough, 1993). This increased susceptibility to false memories due to suggestive interviews was a major issue in the legal field, especially in cases involving abuse or where a child was the sole witness (Ceci & Bruck, 1995; Brainerd & Reyna, 2012). However, when studying false memories driven by semantic associations (e.g., schematic or associative paradigms), then susceptibility to false memories increases with age during the same developmental period (Brainerd, Holliday, & Reyna, 2004; Brainerd & Mojardin, 1998; Reyna & Kiernan, 1994). As described above, FTT would attribute this to greater reliance on gist memory and reasoning with development. This developmental reversal is found even when controlling for word and concept familiarity (Brainerd, Reyna, & Ceci, 2008).

The opposite trend is predicted by FTT, and has been observed, at the other end of life (e.g., Brainerd, Reyna, & Howe, 2009; Dennis, Kim, & Cabeza, 2007; Reyna & Brainerd, 2011). Older adults rely more on gist than younger adults, having lost some degree of verbatim memory in normal aging. However, although FTT would predict it, whether these different age groups are more susceptible to false memories driven by stereotypes has yet to be fully tested. These age effects may also interact with other effects driven by differences in culture or memory testing delays, which have been explored to different degrees.

Culture. While the false memory literature concerning cross-cultural effects on memory is still developing, there are several groups examining cultural differences and their effects on true and false memories. One issue with using established false memory designs in other cultures is that of effectively developing translated versions of those designs, specifically for those that rely mostly on language (e.g., word-association tasks). Contributing to this area of research, several studies in Brazil, using the Brazilian version of the Deese-Roediger-McDermott paradigm, have evaluated the validity of this method of producing false memories (Buratto, Gomes, Prusokowski, & Stein, 2013; Kristensen, Gomes, Justo, & Vieira, 2011; Santos, Silveira, Gomes, & Stein, 2009; Stein, & Gomes, 2009). These researchers found that this task showed a high reliability on several measures. Turning to actual susceptibility to false memories, one key study conducted by Schwartz, Boduroglu, & Gutchess (2013) found that Americans tended to use categories more often than the Turkish sample, which resulted in a greater frequency of false memories. This research is still in its infancy, however, and greater research using cross-cultural samples could serve as tests of robustness in false memory designs (Gutchess & Indeck, 2009; Gutchess, Schwartz, & Boduroglu, 2013).

Delay. One large area of study within false memory research is how time between studying and testing affects susceptibility to false memories. This not only serves a method to account for real-life conditions (e.g., that few occasions involve memory testing immediately after events) but also helps memory researchers gain a better understanding of how memories (false and true) last overtime. According to FTT, detailoriented, verbatim memories are less resilient over time and fade easily compared to fuzzy, gist memories, which tend to be preserved over time. This dynamic should result in increased susceptibility to false memories that are facilitated by semantic relationships (i.e., stereotypes), and this prediction is supported by empirical research on false memory (Koriat, Levy-Sadot, Edry, & de Marcas, 2003; Reyna & Kiernan, 1994; Roediger, McDermott, & Robinson, 1998; Thapar & McDermott, 2001). However, this effect, and any possible interactions, have yet to be examined within a study involving self-generated stereotypes, multiple age groups, and multiple samples across cultures.

False Memories and Stereotyping

According to FTT, gist memories are also the main influence behind false memories driven by certain semantic or schematic relationships (Brainerd & Reyna, 2005; Brainerd & Reyna, 2012). There is an abundance of literature that has shown that when information (both studied targets and non-studied distractors) conforms to a certain set of semantic relationships, such as a schema (a set of general knowledge about a certain situation or setting; Bartlett, 1932; Piaget, 1968) or stereotype of a person, environment, people are more likely to remember (or falsely remember in the case of distractors) these memory probes (Banaji & Greenwald, 1995; Fyock & Stangor, 1994; Leichtman & Ceci, 1995; Stangor & McMillan, 1992). One study evaluating stereotype-driven false memories was done by Lenton, Blair, and Hastie (2001). In this study, participants were shown a list of roles that were either stereotypically male or female in nature. During the test phase, participants were given a list of probes, both old and new, that included non-studied stereotypical male or female roles and traits. Participants were also asked what they thought the purpose of the study was to control for possible nonmemory confounds. The researchers found that not only were people not aware of the purpose of the study or nature of the studied lists but that their memory was affected by these stereotypes. People were more likely to remember stereotypical traits that were shown but also falsely recognize non-studied items that fit the relevant stereotype. The relationship between false memories and stereotypes is one of particular interest to the field of law - if a person's memory is affected by whether a person or place fit specific stereotypes, and if certain factors may strengthen these effects, then this highlights a potential problem for many individuals who may simply fit the stereotype associated with, for example, behaving a certain way.

Evaluating FTT's Predictions

In our overall study, we had several objectives. First, the study was designed to gather information on how false memories, driven by self-generated stereotypes, compared to true recollections. Through this design, we investigated how the production of false memories changes over the lifespan by comparing groups of older and younger people. In our second experiment, we used a separate sample gathered from Brazil instead of the United States. As discussed earlier, there is no reason to expect major, significant differences between the results of the two countries, but this additional group allows us to examine whether predicted false memory effects generalize across culture. We had several FTT-based hypotheses that were tested in our cross-cultural and developmental design:

1. Older adults will be more susceptible to false memories driven by self-generated stereotypes and, accordingly, not be able to distinguish between distractors that fit stereotypes and true targets as well as younger adults.

2. Subjects of both age groups tested after a delay will have significantly higher susceptibility to false memory production due to verbatim traces fading from memory, necessitating reliance on gist. Again, subjects will be less able to distinguish between true targets and stereotype-consistent distractors.
3. False memories will extend to memories for frequencies of experienced events (meals).

Experiment 1

Methods

Subjects

The U.S. sample was composed of a younger and older subsample. The younger subsample included 770 Cornell University undergraduates (age range = 18-22, M_{age} = 19.45 years, SD_{age} = 1.23, 68.8% female). The subjects were recruited through psychology courses. This sample was 56.7% Caucasian, 28.2% Asian, 6.3% African American, and 8.8% mixed or other; 10.4% of this group was Hispanic. The older subsample was composed of 92 subjects (age range = 59-100, M_{age} = 76.37 years, SD_{age} = 8.56, 66.7% female) recruited through advertisements across campus and nearby communities. The Institutional Review Board of Cornell University approved the study, and all subjects gave written informed consent.

Procedure

Each subject began the study by viewing a presentation, which was started once the subject clicked the computer's mouse (see Appendix). The presentation started by providing the following instructions:

> "You are going to see twenty meals selected at random from all the dinners John and Mike have had for the last month. You will see only entrees but of course John and Mike had side dishes and other foods too. Please pay attention to what John and Mike are eating because we will ask you questions later."

This presentation contained 20 meals (targets) each for 2 fictional characters (40 meals total). Each slide contained a picture of one character's face as well as a sentence describing what meal they had on one day in the past month (e.g. "John had sirloin steak”). There were two characters in total (John and Mike), and each set of meals had a bottom-line “gist.” More specifically, one character preferred only red meat (the “unhealthy” character) whereas the other character preferred white meat, such as chicken or fish (the “healthy” character). The “gist” of either set of meals was not explicitly stated in any way.

Meals were presented sequentially and randomly between characters. Frequency of meals was manipulated so that the characters’ set of 20 meals that they ate in the past month included a high frequency target (presented 12 times; T12), a medium-high frequency target (presented 5 times; T5), a medium-low frequency target (presented 2 times; T2), and a low frequency target (presented once; T1). We varied, between subjects, which character (brunette or blond) had a “healthy” and “unhealthy” gist, regarding their eating behaviors. This was meant to control for possible biases from the study material. All slideshows used were automatically advanced with the same timing.

After completing the presentation, some subjects were randomly assigned to (418 younger adults, 47 older adults) move on to the main tasks of the study. The other group (352 younger adults, 45 older adults) returned at a later date. Subjects were randomly assigned to either receive testing immediately after exposure or after a delay. For subjects in the immediate condition, the testing took place in the same session immediately after the exposure to the stimuli. Subjects in the delay condition were tested in a second session scheduled 6-8 days after the first session.

In the first task, participants provided probability judgments based only on their memory (see Appendix for methodological details). At the end of the probability judgment task, the presentation automatically changed to the instruction slide for the memory test. This task involved a cued recall test, the results of which are the focus of this paper. There was a total of 16 slides each with one meal (8 for each character). After clicking the computer's mouse to begin the task, meals were presented to the subject one by one. Each slide contained a character and a meal (Appendix). On each slide, the subject was asked, "Out of the 20 dinners, how many times did [the character] eat [a particular meal]?". The 8 meals included the exact meals taken from target material (4 for each character), as well as 2 related and 2 false distractors. The distractors were meals that were not presented with the targets and were either true (meaning that the distractor fit the gist of the character) or false (meaning that the distractor fit the gist of the opposite character). The "gist" of the character was having a "healthy" or "unhealthy" diet. The "healthy" or "unhealthy" gist of the character in the judgments was also recorded to control for possible differences between the two gists. The correct frequencies for the 4 distractors each character had were zero.

Analysis

We began by comparing different items to determine whether those in the same category (e.g., related distractors) produced similar effects. Thus, we ran planned analyses to examine differences between the replications of our true related (RA and RB) and false (FA and FB) distractors, which we detail in the Appendix. To simplify the analyses, we then collapsed across replication and defined an item factor with six levels: target presented 12 times, target presented five times, target presented twice, target presented once, true distractor, and false distractor.

The data were analyzed using a 2 (age group: younger, older) x 2 (delay: tested immediately, tested after a delay) x 2 (character: healthy eater gist, unhealthy eater gist) x6 (item: T12, T5, T2, T1, R, F) repeated measures ANOVA with age group and delay as between-subjects factor and character and the 6-level item factor as a within-subjects factor. For this analysis, only the American sample was used. The age groups for that sample consisted of a younger (18-22) group and an older (59-100) group.

Results

Mauchly's test indicated that the assumption of sphericity had been violated, $X^2(14) = 716.673$, $p < .001$. We used the Greenhouse-Geisser correction for all main effects and interactions. To preview, as we present in detail below, a delay and greater age both resulted in higher estimates for related (stereotype-consistent) distractors. The two factors interact to show a pattern where increased age, with a delay, resulted in distractors being given statistically higher estimates on average than a true target.

For our U.S. sample, we found a main effect for our 6-level within-subjects factor of item, $F(3.573, 3065.827) = 352.160$, $MSE = 4423.666$, $p < .001$, $\eta_p^2 = .291$. Subjects' estimates were highest for the target presented 12 times ($M = 7.775$, $SE = .179$), followed by the target presented 5 times ($M = 5.242$, $SE = .142$), the target presented 2 times ($M = 4.561$, $SE = .140$), and the target presented 1 time ($M = 3.044$, $SE = .122$). Estimates for the averaged related distractors ($M = 3.102$, $SE = .126$) were not significantly different than those for the target presented once, $M_{diff} = -.057$, $SE = .118$, $p = .627$. The averaged false distractors were given the lowest estimates ($M = 1.455$, $SE = .116$). Aside from the difference between the target presented once and the averaged related distractor item, pairwise comparisons revealed that all differences were statistically significant ($p < .001$; see Appendix for further detail). We also had a main effect of age group that reached marginal significance, $F(1, 858) = 3.587$, $MSE = 113.016$, $p = .059$, $\eta_p^2 = .004$. Estimates from college-aged subjects ($M = 4.366$, $SE = .059$) were higher than estimates from older adults ($M = 4.027$, $SE = .169$). This difference was marginally significant, $M_{diff} = .339$, $SE = .179$, $p = .059$.

We had a significant 2-way interaction between delay and our 6-level item factor, $F(3.573, 3065.827) = 14.965$, $MSE = 187.987$, $p < .001$, $\eta_p^2 = .017$. Again, as FTT would predict, estimates for items were significantly different from one another and in the order of T12, T5, T2, T1, R, and F for the group tested immediately ($p < .01$; see Appendix). With a delay, some estimates were significantly different. The target presented 12 times had significantly lower estimates after a delay, $M_{diff} = -1.386$, $SE = .359$, $p < .001$. Estimates for the target presented 5 times were significantly higher after a delay, $M_{diff} = .645$, $SE = .285$, $p < .05$, as were estimates for the target presented 2 times, $M_{diff} = .727$, $SE = .281$, $p = .01$, and the average related distractor item, $M_{diff} = 1.240$, $SE = .252$, $p < .001$. Due to these differences, the order of estimates in the delay group were different from the order of the estimates in the immediate group. Estimates for the target presented 12 times were the highest ($M = 7.082$, $SE = .257$), followed by estimates for the targets presented 5 times ($M = 5.565$, $SE = .204$) and 2 times ($M = 4.925$, $SE = .201$). Estimates for the average related distractor item ($M = 3.722$, $SE = .180$) were significantly higher than estimates for the target presented once ($M = 3.183$, $SE = .176$), $M_{diff} = .539$, $SE = .169$, $p = .001$). False distractors had the lowest estimates ($M = 1.469$, $SE = .166$), and did not differ significantly across delay.

In addition to our significant 2-way interaction between delay and our 6-level item factor, we also had a significant 2-way interaction between age group and our item factor, $F(3.573, 3065.827) = 6.844$, $MSE = 85.971$, $p < .001$, $\eta_p^2 = .008$. All estimates for items in the college-aged group were significantly different from one another and in the order of T12, T5, T2, T1, R, and F ($p < .001$; see Appendix). The older group had significantly lower estimates for the target presented 5 times, $M_{diff} = -.642$, $SE = .285$, $p < .05$, the target presented 2 times, $M_{diff} = -.792$, $SE = .281$, $p < .01$, and the target presented once, $M_{diff} = -.960$, $SE = .245$, $p < .001$. Estimates for the average related distractor item were higher for the older group, $M_{diff} = .521$, $SE = .252$, $p < .05$. For the older age group, there were also differences in how the estimates compared to one another. Estimates for the target presented 12 times were still the highest ($M = 7.536$, $SE = .339$), followed by estimates for the targets presented 5 times ($M = 4.921$, $SE = .269$) and 2 times ($M = 4.165$, $SE = .265$). Unlike the college-aged group, the estimates for the average related distractor item ($M = 3.362$, $SE = .238$) were significantly higher than the estimates for the target presented once ($M = 2.565$, $SE = .231$), $M_{diff} = .798$, $SE = .222$, $p < .001$. Consistent with the other analyses, false distractors had the lowest estimates ($M = 1.614$, $SE = .219$).

We also had a significant 3-way interaction between age group, delay, and our 6-level item factor, $F(3.573, 3065.827) = 2.829$, $MSE = 35.542$, $p = .028$, $\eta_p^2 = .003$. Subjects who were in the college-aged sample and were tested immediately gave the highest estimates to the target presented 12 times ($M = 9.064$, $SE = .159$), followed by the target presented 5 times ($M = 5.153$, $SE = .126$), 2 times ($M = 3.988$, $SE = .261$), and once ($M = 3.249$, $SE = .108$). Estimates for the averaged related distractor item were lower than the targets ($M = 2.134$, $SE = .111$; $p < .05$; see Appendix for full output). Estimates for the averaged false distractor item were significantly lower than all other items ($M = 1.094$, $SE = .103$; $p < .05$). In the college-aged sample there were significant differences between the delay and immediate groups for several items. Subjects in the delay condition gave significantly lower estimates for the target presented 12 times ($M_{diff} = -2.100$, SE = .235, $p < .001$). For all other targets and both distractor items, the subjects in the delay condition gave significantly higher estimates ($p < .01$; see Appendix for full output). The effects of the delay condition did not subsequently affect how the frequency estimates for the items compared to each other. Estimates for all targets and distractors remained significantly different from each other and in the order of T12, T5, T2, T1, R, and F ($p < .05$; see Appendix for full output).

In the older sample, we see a much different pattern. In the immediately tested condition, subjects gave the highest estimates to the targets presented 12 times (M = 7.873, SE = .474), 5 times (M = 4.687, SE = .376), and two times (M = 3.853, SE = .371), in that order. Estimates for the target presented once and the average related distractor were not significantly different from each other ($M_{diff} = .267$, SE = .311, $p = .390$). Estimates for the false distractors were the lowest out of all the items (M = 1.789, SE = .307). Aside from T1 and R, all other items were significantly different from one another ($p < .05$; see Appendix for full output). The only item that was significantly different for the delay compared to immediate condition in this older group was the average related distractor item, which was significantly higher after a delay ($M_{diff} = 1.064$, SE = .475, $p < .05$). For the older group in the delay condition, estimates for the target presented 12 times were still significantly higher than all other items (M = 7.200, SE = .484; see Appendix). The estimates for the targets presented 5 times and 2 times were not significantly different from each other, $M_{diff} = .678$, SE = .410, $p = .099$, nor were the estimates for the target presented two times and the averaged related distractor item, $M_{diff} = .583$, $SE = .334$, $p = .081$. The difference between the estimates for the target presented 5 times and the averaged related distractor item was statistically significant, $M_{diff} = 1.261$, $SE = .394$, $p < .01$. The estimates for the averaged related distractor item were also significantly higher than those for the target presented once, $M_{diff} = 1.328$, $SE = .318$, $p < .001$). Consistent with all other findings, estimates for the average false distractor item were the lowest of all the items ($M = 1.439$, $SE = .313$).

Discussion

In this first experiment, our results supported several of FTT's predictions. Overall, false memories, measured by the estimates for our stereotype-consistent distractors, were stronger when participants were tested after a delay or with older participants. Within our highest order interaction, there were other key findings. Consistent with FTT, our youngest group, when tested immediately, were the most resistant to false memories resulting from self-generated stereotypes, evident from the fact that estimates for all targets were significantly higher than the distractors. FTT would attribute this to both greater reliance on verbatim memories for younger people and the fact that testing immediately accessed readily available verbatim memories. On the opposite end of the spectrum would be our older sample tested after a delay. Per FTT, this group naturally relies more on gist, and with the delay, verbatim memories are less readily available. Our results support this theoretical prediction, as estimates for related distractors from our oldest adults after a delay were higher than those for a target. Within our highest order interaction, older adults after a delay were the only group that showed this result. Both older adults tested immediately and college students tested after a delay showed levels of false memory production between the two other groups. This finding suggests that younger adults' memory resembles much older adults' after a delay, even though their memory was the most accurate when tested immediately. We aimed to replicate these effects in our second experiment with a sample from Brazil between groups closer in age. Further implications from both experiments and the planned comparison between the countries will be discussed in the general discussion.

Experiment 2

Methods

Subjects

The college-aged subsample from Brazil were 117 undergraduate students from three different Brazilian universities (age range = 18-22, M_{age} = 20.17; SD_{age} = 1.33; 53.8% female). The post-college subsample consisted of 133 subjects gathered from the local community near the university (age range 23-54, M_{age} = 27.72; SD_{age} = 6.24; 37.1% female). The Institutional Review Boards of Cornell University and Pontifícia Universidade Católica do Rio Grande do Sul approved the study, and all subjects gave written informed consent.

Procedure

Our procedure for the second experiment was identical to that of the first experiment. Just as in the previous experiment, after completing the presentation, subjects were assigned to (82 college-aged adults, 66 post-college adults) move on to the main tasks of the study. The other group (35 college-aged adults, 67 post-college adults) returned after a 6-8 day delay.

Analysis

Identical to the previous experiment, we collapsed across replication and defined an item factor with six levels: target presented 12 times, target presented five times, target presented twice, target presented once, true distractor, and false distractor. For this second experiment, we ran a 2 (age group: college-aged, post-college) x 2 (delay: tested immediately, tested after a delay) x 2 (character: healthy eater gist, unhealthy eater gist) x6 (item: T12, T5, T2, T1, R, F) repeated measures ANOVA with age group and delay as between-subjects variables and character and the 6-level item factor as within-subjects variables. For this analysis, only the sample from Brazil was used. Age groups were a college-aged (18-22) group and a post-college (23-54) group.

Results

Mauchly's test indicated that the assumption of sphericity had been violated, $X^2(14) = 272.968$, $p < .001$. Therefore, we used the Greenhouse-Geisser correction for all main effects and interactions. Our results, detailed below, show a similar trend to our U.S. sample, with some key differences. Delay significantly increased participants' estimates of distractors to the point where targets and distractors were no longer significantly different from one another. However, in our marginal 3-way interaction between the two age groups, the two delay conditions, and the 6-item factors, our collegiate sample, when tested immediately or after delay, does not give significantly different estimates for stereotype-consistent distractors and a true target.

We found one main effect for our 6-level within-subjects factor of item, $F(3.293, 810.199) = 349.012$, $MSE = 4240.499$, $p < .001$, $\eta_p^2 = .587$. Subjects' frequency estimates were highest for the target presented 12 times ($M = 7.715$, $SE = .228$), followed by the target presented 5 times ($M = 4.967$, $SE = .157$), the target presented 2 times (M =

4.629, SE = .157), and the target presented 1 time (M = 2.518, SE = .126). Estimates for the averaged related distractors (M = 2.452, SE = .146) were higher than those for the target presented once, though this difference was not significant (M_{diff} = .065, SE = .121, p = .590). Estimates for the averaged related distractors and the target presented once were lower than those of the other targets, $p < .01$. The averaged false distractors were given the lowest estimates (M = .624, SE = .103; $p < .001$). Aside from the T1-R difference, all differences were statistically significant ($p < .001$).

There was a significant 2-way interaction between delay and our 6-level item factor, F(3.293, 810.199) = 23.815, MSE = 289.347, $p < .001$, $\eta_p^2 = .088$. As FTT would predict, estimates for items were significantly different from one another and in the order of T12, T5, T2, T1, R, and F for the group that was tested immediately ($p > .05$; see the Appendix for further detail). Several items had significantly different estimates between the delay and immediate group. Estimates for the target presented 12 times was significantly lower in the delay group, M_{diff} = -2.263, SE = .457, $p < .001$. The target presented 2 times had significantly higher estimates in the delay group, M_{diff} = 1.306, SE = .315, $p < .001$, as did the related distractor item, M_{diff} = 1.183, SE = .293, $p < .001$. These group differences were also reflected in how the estimates for the items compared to each other. Estimates for the target presented 12 times were still the highest (M = 6.583, SE = .358), followed by estimates for the targets presented 5 times (M = 5.266, SE = .246) and 2 times (M = 5.282, SE = .247), which were not significantly different from each other (M_{diff} = -.016, SE = .234, p = .946). The target presented once (M = 2.696, SE = .198) and the related distractors (M = 3.044, SE = .229) were not significantly different from each other (M_{diff} = -.348, SE = .190, p = .068) and had significantly lower estimates than other targets, $p < .05$. False distractors had the lowest estimates ($M = .696$, $SE = .162$; $p < .001$).

We also had a marginal 3-way interaction between age group, delay, and our 6-level item factor, $F(3.293, 810.199) = 2.232$, $MSE = 27.118$, $p = .077$, $\eta_p^2 = .009$. Subjects who were in the college-aged sample and were tested immediately gave the highest estimates to the target presented 12 times ($M = 9.579$, $SE = .379$), followed by target presented 5 times ($M = 4.713$, $SE = .261$), and 2 times ($M = 3.988$, $SE = .261$). Estimates for the target presented once and the averaged related distractor item were not significantly different from one another ($M_{diff} = -1.512$, $SE = .237$, $p = .138$) and significantly lower than the other targets ($p < .001$; see Appendix for further detail). Estimates for the averaged false distractor item were significantly lower than all other items ($M = .610$, $SE = .172$). There were significant differences, after a delay, for estimates for the target presented 12 times ($M_{diff} = 3.208$, $SE = .693$, $p < .001$) and the target presented 2 times ($M_{diff} = -1.526$, $SE = .478$, $p = .002$). This delay-induced shift, as we hypothesized, affected the differences between the estimates of the items. Estimates for the targets presented 12 ($M = 6.371$, $SE = .580$), 5 ($M = 5.300$, $SE = .399$), and 2 times ($M = 5.514$, $SE = .400$) were all not significantly different from one another ($p > .05$; see the Appendix for further detail). Significantly lower than this group of targets, estimates for the target presented once and the average related distractor item were still not significantly different from one another ($M_{diff} = -.364$, $SE = .304$, $p = .237$). Lastly, the estimates for the average false distractor item remained significantly lower than all other items ($p < .001$).

In the post-college sample, we see a similar pattern. Without a delay, all items were significantly different from one another in the order of T12, T5, T2, T1, R, and F ($p < .05$). Estimates for the target presented 12 times were significantly lower after a delay ($M_{diff} = -1.318$, $SE = .595$, $p < .05$), whereas estimates for the target presented 2 times and the average related distractor item were significantly higher after a delay ($M_{diff} = -1.085$, $SE = .410$, $p < .01$; $M_{diff} = 1.578$, $SE = .381$, $p < .001$). Just like the college-aged group, this altered the differences between estimates. Estimates for the target presented 12 times were still significantly higher than all other items ($p < .01$). Targets presented 5 times and 2 times were not significantly different from each other ($M_{diff} = .183$, $SE = .274$, $p = .506$). The target presented once and the averaged related distractor item were also not significantly different from one another ($M_{diff} = -.332$, $SE = .222$, $p = .136$). Consistent with all other findings, estimates for the average false distractor item were the lowest of all the items ($M = .795$, $SE = .190$).

Discussion

In our second experiment, we replicated many effects found in our first experiment but with a separate, Brazilian sample. Although the interaction between age group and delay was only marginally significant, this was most likely due to the fact that the two age groups in this sample were much closer in average age (a 56.92-year mean age difference in Experiment 1 versus a 7.55-year mean age difference in this experiment). We also observed some other differences in our results from our previous experiment with a U.S. sample. One such finding was that, in the younger group in this Brazilian sample, the estimates for targets and stereotype-consistent distractors were not significantly different from a true target, even without a delay. We evaluated the effects of culture in greater detail with a planned comparison between the collegiate age groups from both countries, reported in the next section. Both experiments and the planned comparison are discussed in greater detail in the general discussion.

Planned Comparison

Methods

Subjects

In our planned comparison, we compared the college-aged subsamples from both the U.S. and Brazil. The U.S. subsample consisted of the 770 Cornell University undergraduates (age range = 18-22, M_{age} = 19.45 years, SD_{age} = 1.23, 68.8% female). The Brazilian subsample was composed of the 117 undergraduate students from three different Brazilian universities (age range = 18-22, M_{age} = 20.17 years; SD_{age} = 1.34; 53.8% female).

Procedure

This planned comparison used the existing data from the other two experiments. As such, the procedure for each country was identical and described in the first experiment. Some subjects (418 U.S. college-aged adults, 82 Brazilian college-aged adults) were tested immediately, and the rest (352 U.S. college-aged adults, 35 Brazilian college-aged adults) were tested after a 6-8 day delay.

Analysis

Identical to the previous experiments, we collapsed across replication and defined an item factor with six levels: target presented 12 times, target presented five times, target presented twice, target presented once, true distractor, and false distractor. For the cross-cultural comparison, we ran a 2 (country: Brazil, U.S.) x 2 (delay: tested immediately, tested after a delay) x 2 (character: healthy eater gist, unhealthy eater gist) x6 (item: T12, T5, T2, T1, R, F) repeated measures ANOVA with country and delay as between-subjects variables and the character and the 6-level item factor as within-subjects variables.

Results

Mauchly's test indicated that the assumption of sphericity had been violated, $X^2(14) = 759.93$, $p < .001$. Therefore, we used the Greenhouse-Geisser correction for all main effects and interactions. Overall, there was a significant difference between the two countries, where the U.S. had higher frequency estimates overall. However, this difference did not significantly affect any results related to false memory (i.e., there were no interactions with country and the distractors). A participant's home country neither affected estimates for related distractors, nor how these estimates compared to true targets. The effect of delay did increase susceptibility to false memories, and this effect did not interact with the effect of home country. Details are provided below.

We found main effects for our 6-level within-subjects factor of item, $F(3.588, 3168.601) = 494.267$, $MSE = 5842.821$, $p < .001$, $\eta_p^2 = .359$, and our between-subjects factor of country, $F(1, 883) = 7.394$, $MSE = 219.382$, $p < .007$, $\eta_p^2 = .008$. Subjects in the U.S. had significantly higher frequency estimates ($M = 4.366$, $SE = .057$) than the subjects in Brazil ($M = 3.908$, $SE = .159$). Subjects' frequency estimates were highest for the target presented 12 times ($M = 7.995$, $SE = .170$), followed by the target presented 5 times ($M = 5.825$, $SE = .138$), the target presented 2 times ($M = 4.854$, $SE = .131$), and the target presented 1 time ($M = 3.031$, $SE = .118$). The averaged related distractors ($M = 2.706$, $SE = .117$) were given lower estimates than the presented targets but higher estimates than the averaged false distractors, which were given the lowest estimates (M = .624, SE = .103). The differences between these estimates were all statistically significant ($p < .01$; see Appendix for details).

There were also 2 significant 2-way interactions in our cross-country results. First, there was a significant interaction between our 6-level item factor and country, $F(3.588, 3168.601) = 2.538$, $MSE = 30.006$, $p = .044$, $\eta_p^2 = .003$. Subjects in the US had higher estimates for the target presented 5 times ($M_{diff} = .557$, $SE = .275$, $p = .043$), the target presented once ($M_{diff} = .986$, $SE = .235$, $p < .001$), and false distractors ($M_{diff} = .693$, $SE = .212$, $p = .001$). There was also a significant 2-way interaction between our 6-level item factor and delay, $F(3.588, 3168.601) = 2.538$, $MSE = 492.689$, $p < .001$, $\eta_p^2 = .045$. Estimates for the target presented 12 times were significantly lower after a delay ($M_{diff} = -2.654$, $SE = .340$, $p < .001$), whereas frequency estimates were significantly higher for the target presented 5 times ($M_{diff} = .704$, $SE = .275$, $p = .011$), the target presented 2 times ($M_{diff} = 1.178$, $SE = .261$, $p < .001$), and the related distractor ($M_{diff} = 1.101$, $SE = .235$, $p < .001$).

Looking at the two samples in greater detail, the relationship between frequency estimates was different depending on which country the participants were from. For the U.S. sample, the relationship was identical to that seen in the main effect (i.e., T12 > T5 > T2 > T1 > R > F). However, this was not the case for the Brazilian sample. In this sample, the target presented 12 times was given the highest estimates (M = 7.975, SE = .320). The targets presented 5 times (M = 5.007, SE = .259) and 2 times (M = 4.751, SE = .246) were not signiticantly different from one another ($M_{diff} = .256$, $SE = .272$, $p = .347$), but participants gave both significantly lower estimates than the target presented 12 times, $p < .001$. The estimates for the target presented once ($M = 2.538$, $SE = .222$) and the combined related distractor item ($M = 2.571$, $SE = .221$) were also not different from each other ($M_{diff} = .033$, $SE = .209$, $p = .875$), and these estimates were significantly lower than those of the targets presented 2 or more times, $p < .001$. The false distractors ($M = .604$, $SE = .199$) were given the lowest estimates, $p < .001$. Similarly, there were differences in the relationship between targets and distractors depending on whether the participant was tested after a delay or not. In the immediate condition, the differences between all the targets and distractors were significant and in the same order as seen in the main effect of item ($p < .001$; T12 > T5 > T2 > T1 > R > F). In the delay condition, the target presented 12 times was still given the highest estimates ($M = 6.668$, $SE = .281$). However, this was followed by the targets presented 5 times ($M = 5.637$, $SE = .227$) and 2 times ($M = 5.443$, $SE = .216$), which were not significantly different from each other ($M_{diff} = .194$, $SE = .238$, $p = .416$). The target presented once ($M = 3.200$, $SE = .194$) and the related distractors ($M = 3.257$, $SE = .194$) were also not significantly different from each other ($M_{diff} = -.057$, $SE = .183$, $p = .756$) and had significantly lower estimates than other targets, $p < .001$. False distractors had the lowest estimates ($M = 1.049$, $SE = .175$).

Discussion

This planned comparison allowed us to examine the effects of country on false memory. Overall, our results show that, U.S. participants gave higher estimates overall and that our Brazilian sample showed a greater tendency to equate targets and related distractors. However, this cultural effect did not interact with the effects of delayed testing. This indicates that a participant's country did not significantly affect the increase in false memory susceptibility after a delay. This planned comparison serves as a key test of robustness for translating and testing false memory paradigms in other cultural settings.

General Discussion

This study provides key insight into the nature of the effect of self-generated stereotypes on false memories for frequency, and how this effect interacts with delay, age, and culture. From both our first and second experiment, we saw that self-generated stereotypes facilitate the production of false memories, and that this effect is strengthened after only a 7-day delay. Stereotype-consistent distractors were given estimates equal to, or in some cases greater than, true events merely because they fit the stereotype, or gist, of a hypothetical person.

This is not meant to dismiss the important age-related findings of this study, however. As people age, and as time passes between the exposure to events and the verbatim ability to remember them, the conflation of items that were seen and items that merely fit the gist becomes stronger, as seen in the differences between the age groups and the groups with and without delays in our analyses, respectively. In both experiments, but more pronounced in our U.S. sample, the college students' memory was the most accurate out of all the groups when tested without a delay. One of the most interesting results from this study, however, was that this changed after a delay of only one week. After that, these college-aged people confused items that have been presented with those that merely fit the gist of the series of events, and their performance becomes similar to that of much older adults. This is consistent with FTT, which would predict this result because the younger adults rely more on the verbatim memories that would still be readily accessible without a delay. Because this group relied more on verbatim memory, their estimates changed dramatically as time passes due to verbatim details fading from memory.

In the older adults in that same experiment, their estimates were more stable over time, and their estimates for the gist-consistent distractors were significantly higher than those of the college-students. Per FTT, this is due to the fact that, as people age, they rely more on the gist of experiences from the start, which are more resilient to forgetting. However, as noted earlier, this gist forsakes the precise details and distinctions of verbatim memory, encompassing events that did not occur at all but merely are related to the gist that was extracted. Understandably, in our older U.S. sample, the oldest group of all the experiments, the stereotype-consistent distractors were given estimates not-significantly different from real events even without a delay. A delay affected only the related distractors in this older group, which further strengthened the stereotype-driven false memories.

In our oldest group after a delay, estimates for related distractors were not significantly different from actual targets presented 2 times (out of twenty total times, or 10% of the whole presentation experience) and were higher than estimates for an event that actually occurred. With this group, their memory no longer became about just what truly happened. Instead, based on the results in this study, their memory consisted of what happened most often and fits the gist (targets presented twelve times) and what happened less or fits the gist (targets presented five, two, or one times and related distractors). The gist of reality, in this sense, superseded reality itself.

From our cross-cultural analyses, the results from both countries tell similar stories. Between the countries, there were few qualitative differences. The sample from one country (the U.S.) was associated with higher estimates overall, and sample from the other country, Brazil, had a greater tendency to group targets and related distractors together. This finding seems to contrast recent emprical literature, which has found that participants from the U.S. tend to be more susceptible to semantically-related false memories than participants from other countries (Gutchess, Schwartz, & Boduroglu, 2013). Apart from this finding, a participant's country did not interact with the effect delay had on false memories. The standard delay effects were preserved in both samples. Taken with the results from each individual country, this suggests that, overall, the patterns we see are similar across these cultures, with few qualitative cultural differences.

Limitations and Future Directions

The memory task itself was not counterbalanced before and after probability judgment questions, but always came at the end to maximize forgetting. Ideally the order of tasks would have been counterbalanced, although that would require larger samples. Having a more diverse sample in Experiment 1, especially for our oldest subsample, could help improve the generalizability of our ageing results. Our oldest subsample in Experiment 1 was composed entirely of non-Hispanic Caucasians, which was partly due to the difficulty in getting a sizeable portion of elderly participants from minority populations in the geographic area. In Experiment 2, our sample was gathered entirely from Brazilian universities, which provided us with greater diversity. Brazilians are considered Latinos according to some official government offices (e.g., the Smithsonian Institution) and a relatively large proportion are black or mixed race. All of these considerations are important to consider for any future designs.

Conclusions and Implications

To summarize, our study highlights the influence of self-generated stereotypes (i.e. the gist of a person or group of people) has on memory for events, as well as how this effect is augmented when people are tested after a delay or if they are simply older (or both). Per FTT, people form and store the gist (including stereotypes) independently and in parallel to the storing of verbatim details. Reliance on the former, theoretically, facilitated false memory production in our design, whereas reliance on the latter would operate against it. As verbatim details fade more rapidly than the gist, the influence of gist is strengthened after delays. We see this effect most clearly in our older samples. As younger groups rely more on verbatim memory, according to FTT, their memory should most resemble reality as it occurred, which our results showed. By contrast, older people relied more on gist memory, and when tested after a delay, they should have the “gistiest” memory, which our results also show. Between these two extremes, we have the younger groups tested after a delay and the older groups tested immediately. These groups exhibit similar memory patterns, which demonstrate the power that these gisty stereotypes can have (where a college student after a delay can have similar memory to someone three times as old) and completes the spectrum from mostly verbatim memory to mostly gist memory.

These results have key implications for lawyers and those involved in the criminal justice system. If a person merely fits the stereotype of a criminal (or someone who partakes in behavior relevant to a legal case), our results suggest that this may skew a witness’s memories such that, for some people, it may no longer be apparent what truly happened and what just fits the gist. Furthermore, the strength of these stereotypes augmented by age and time, such that the effects of stereotypes on memory may not be easily avoided. Under the most ideal circumstances, a young witness makes a detailed and official recording of their memory immediately after experiencing the events, through a (non-suggestive) police interview or other means. However, it is impossible to choose the age of a witness, and it is improbable that a person will be willing and able to make a detailed recording of such events after witnessing them. Additionally, if a witness were called to testify in court, the delay between their testimony and the events may result in them contradicting their original record of events, even if it were perfect. This would bring both the testimony and the original record into question. Thus, we conclude that the effect stereotypes have on memory is both pervasive and intensifies with age and time. This necessitates further exploration and understanding, particularly within the area of law, as these effects, driven by "fuzzy" gist traces in memory, may determine whether a person is convicted of a crime, justly or not.

References

Banaji, M. R., & Greenwald, A. G. (1995). Implicit stereotyping in judgments of fame. *Journal of Personality and Social Psychology, 68*, 181–198.

Bartlett, F. C. (1932). *Remembering: A study in experimental and social psychology*. Cambridge: Cambridge University Press.

Beversdorf, D. Q., Smith, B. W., Crucian, G. P., Anderson, J. M., Keillor, J. M., Barrett, A. M., Hughes, J. D., Felopulos, G. J., Bauman, M. L., Nadeau, S. E., Heilman, K. M. (2000). Increased discrimination of "false memories" in autism spectrum disorder. *Proceedings of the National Academy of Sciences of the United States of America, 97*(15), 8734–8737. DOI: 10.1073/pnas.97.15.8734.

Bowler, D., Gardiner, J., Grice, S., & Saavalainen, P. (2000). Memory illusions: False recall and recognition in adults with Asperger's syndrome. *Journal of Abnormal Psychology*, 109, 663–672.

Brainerd, C. J. (2013). Murder must memorise. *Memory* (Hove, England), 21(5), 547–555.

Brainerd, C. J. & Gordon, L. L. (1994). Development of verbatim and gist memory for numbers. *Developmental Psychology*, 30(2), 163- 177. DOI: 10.1037/0012-1649.30.2.163.

Brainerd, C. J., Holliday, R. E., & Reyna, V. F. (2004). Behavioral measurement of remembering phenomenologies: So simple a child can do it. *Child Development, 75*, 505-522. DOI: 10.1111/j.1467-8624.2004.00689.x.

Brainerd, C. J., & Mojardin, A. H. (1998). Children's false memories for sentences: Long-term persistence and mere-testing effects. *Child Development, 69*, 1361-1377.

Brainerd, C. J., & Reyna, V. F. (2005). *The science of false memory*. New York: Oxford University Press.

Brainerd, C. J., & Reyna, V. F. (2012). Reliability of children's testimony in the era of developmental reversals. *Developmental Review, 32*(3), 224–267. DOI: 10.1016/j.dr.2012.06.008

Brainerd, C. J., & Reyna, V. F. (2015). Fuzzy-trace theory and lifespan cognitive development. *Developmental Review*, 38, 89-121. DOI: 10.1016/j.dr.2015.07.006.

Brainerd, C. J., Reyna, V. F., & Ceci, S. J. (2008). Developmental reversals in false memory: A review of data and theory. *Psychological bulletin*, *134*(3), 343-382.

Brainerd, C. J., Reyna, V. F., Gomes, C. F. A., Kenney, A. E., Gross, C. J., Taub, E. S., & Spreng, R. N. (2014). Dual-retrieval models and neurocognitive impairment. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 40(1), 41–65. DOI: 10.1037/a0034057

Brainerd, C. J., Reyna, V. F., & Howe, M. L. (2009). Trichotomous processes in early memory development, aging, and neurocognitive impairment: A unified theory. *Psychological Review, 116*(4)*,* 783-832. DOI:10.1037/a0016963

Brainerd, C. J., Reyna, V. F., Wright, R., & Mojardin, A. H. (2003). Recollection rejection: False-memory editing in children and adults. *Psychological Review, 110*, 762–784. DOI: 10.1037/0033-295X.110.4.762

Brainerd, C. J., Reyna, V. F., & Zember, E. (2011). Theoretical and forensic implications of developmental studies of the DRM illusion. *Memory & Cognition*, *39*(3), 365-380.

Bruck M. & Ceci S. J. (1999). The suggestibility of children's memory. *Annual Review of Psychology, 50*, 419–439.

Bruck M, Ceci SJ, Francoeur E, & Barr R. (1995). I hardly cried when I got my shot: Influencing children's reports about a visit to their pediatrician. *Child Development, 66*, 193–208.

Buratto, L.G., Gomes, C.F.A., Prusokowski, T.S., & Stein, L.M. (2013). Inter-item association norms for the Brazilian version of the emotional Deese/Roediger-McDermott paradigm. *Psicologia: Reflexão & Crítica, 26*, 367-375.

Ceci, S. J. & Bruck, M. (1993). The suggestibility of the child witness: A historical review and synthesis. *Psychological Bulletin, 113*, 403–439.

Ceci, S. J. & Bruck, M. (1995). *Jeopardy in the courtroom*. Washington, DC: American Psychological Association.

Clark, L. R., Schiehser, D. M.,Weissberger, G. H., Slamon, D. P., Delis, D. C., & Bondi, M.W. (2012). Specific measures of executive function predict cognitive decline in older adults. *Journal of the International Neuropsychological Society*, 18, 118–127.

Corbin, J. C., Reyna, V.F., Weldon, R. B., and Brainerd, C. J. (2015). How Reasoning, Judgment, and Decision Making are Colored by Gist-based Intuition: A Fuzzy-Trace Theory Approach, *Journal of Applied Research in Memory and Cognition*, DOI: 10.1016/j.jarmac.2015.09.001.

Deese, J. (1959). On the prediction of occurrence of particular verbal intrusions in immediate recall. *Journal of Experimental Psychology*, *58*(1), 17-22. DOI: 10.1037/h0046671.

Dennis, M., Lazenby, A. L., & Lockyer, L. (2001). Inferential language in high-function children with autism. *Journal of Autism and Developmental Disorders*, 31(1), 47–54, DOI: 10.1023/A:1005661613288.

Dennis N. A., Kim H., & Cabeza R. (2007) Effects of aging on true and false memory formation: an fMRI study. *Neuropsychologia*, 45, 3157–3166. DOI: 10.1016/j.neuropsychologia.2007.07.003.

Fyock, J., & Stangor, C. (1994). The role of memory biases in stereotype maintenance. *British Journal of Social Psychology, 33*, 331–343.

Gutchess, A. H., Schwartz, A. J., & Boduroglu, A. (2011). The influence of culture on memory. In D. D. Schmorrow & C. M. Fidopiastis (Eds.), *Lecture notes in artificial intelligence. Lectures notes in computer science, 6780* (pp. 67–76). Berlin: Springer-Verlag.

Gutchess, A. H., & Indeck, A. (2009). Cultural influences on memory. *Progress in Brain Research, 178*, 137–150.

Kassin, S. M. (2005). The psychology of confessions: does innocence put innocents at risk? *American Psychologist*, 60, 215–228.

Koriat, A., Levy-Sadot, R., Edry, E., & de Marcas, G. (2003). What do we know about what we cannot remember? Accessing the semantic attributes of words that cannot be recalled. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 29*, 1095–1105.

Kristensen, C.H., Gomes, C.F.A., Justo, A.R., & Vieira, K. (2011). Brazilian norms for the Affective Norms for English Words. *Trends in Psychiatry and Psychotherapy, 33*, 135-146.

Loftus, E. F., & Pickrell, J. E. (1995). The formation of false memories. *Psychiatric Annals*, 25(12), 720–725.

Leichtman, M. D., & Ceci, S. J. (1995). The effects of stereotypes and suggestions on preschoolers' reports. *Developmental Psychology, 31*(4), 568–578.

Lenton, A. P., Blair, I. V., & Hastie, R. (2001). Illusions of Gender: Stereotypes Evoke False Memories. *Journal of Experimental Social Psychology, 37*(1), 3–14. DOI: 10.1006/jesp.2000.1426.

McGough, L. S. (1993). *Child witnesses: Fragile voices in the American legal system.* New Haven, CT: Yale University Press.

Mills, B., Reyna, V. F., & Estrada, S. (2008). Explaining contradictory relations between risk perception and risk taking. *Psychological Science, 19*(5), 429–433. DOI: 10.1111/j.1467-9280.2008.02104.x.

O'Connell, A., & Greene, C. M. (2016). Not strange but not true: self-reported interest in a topic increases false memory. *Memory*, DOI: 10.1080/09658211.2016.1237655.

Piaget, J. (1968). *On the development of memory and identity*. Worcester, MA: Clark University Press.

Reyna, V. F. (1992). Reasoning, remembering, and their relationship: Social, cognitive, and developmental issues. In M. L. Howe, C. J. Brainerd, & V. F. Reyna (Eds.), *Development of long-term retention* (pp. 103–127). New York, NY: Springer-Verlag.

Reyna, V. F. (1995). Interference effects in memory and reasoning: A fuzzy trace theory analysis. In F. N. Dempster & C. J. Brainerd (Eds.), *Interference and inhibition in cognition* (pp. 29–59). San Diego, CA, US: Academic Press.

Reyna, V. F. (2011). Across the lifespan. In Fischhoff, B., Brewer, N.T., Downs, J.S. (Eds), *Communicating risks and benefits: An evidence-based user's guide* (pp. 111-119). U.S. Department of Health and Human Services, Food and Drug Administration. Retrieved from http://www.fda.gov/ScienceResearch/SpecialTopics/RiskCommunication/default.htm

Reyna, V. F. (2012). A new intuitionism: Meaning, memory, and development in fuzzy-trace theory. *Judgment and Decision Making, 7*(3), 332–359.

Reyna, V. F., & Brainerd, C. J. (1995). Fuzzy-trace theory: an interim synthesis. *Learning and Individual Differences*, 7, 1–75.

Reyna, V. F., & Brainerd, C. J. (2011). Dual processes in decision making and developmental neuroscience: A fuzzy-trace model. *Developmental Review, 31*, 180–206. DOI: 10.1016/j.dr.2011.07.004.

Reyna, V. F., Chick, C. F., Corbin, J. C., & Hsia, A. N. (2014). Developmental Reversals in Risky Decision Making: Intelligence Agents Show Larger Decision Biases Than College Students. *Psychological Science*, 25(1), 76–84. DOI: 10.1177/0956797613497022.

Reyna, V.F., Corbin, J.C., Weldon, R.B., & Brainerd, C.J. (2016). How fuzzy-trace theory predicts true and false memories for words and sentences. *Journal of Applied Research in Memory and Cognition*.

Reyna, V. F., & Ellis, S.C. (1994). Fuzzy-trace theory and framing effects in children's risky decision making. *Psychological Science, 5*, 275–279. DOI:10.1111/j.1467-9280.1994.tb00625.x

Reyna, V. F., Estrada, S. M., DeMarinis, J. A., Myers, R. M., Stanisz, J. M., & Mills, B. A. (2011). Neurobiological and memory models of risky decision making in adolescents versus young adults. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 37*(5), 1125–1142. DOI: 10.1037/a0023943.

Reyna, V. F., & Kiernan, B. (1994). Development of gist versus verbatim memory in sentence recognition: Effects of lexical familiarity, semantic content, encoding instructions, and retention interval. *Developmental Psychology, 30*(2), 178-191. DOI: 10.1037/0012-1649.30.2.178.

Roediger, H. L., & McDermott, K. B. (1995). Creating false memories: Remembering words not presented in lists. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *21*(4), 803-814.

Roediger, H. L., III, McDermott, K. B., & Robinson, K. J. (1998). The role of associative processes in creating false memories. In M. A. Conway, S. E. Gathercole, & C. Cornoldi (Eds.), *Theories of memory II* (pp. 187-245). Hove, U.K.: Psychological Press.

Rundblad, G., & Annaz, D. (2010). The atypical development of metaphor and metonymy comprehension in children with autism. *Autism: The International Journal of Research and Practice*, 14(1), 29–46, DOI: 10.1177/1362361309340667.

Santos, R.F., Silveira, R.A.T., Gomes, C.F.A, & Stein, L.M. (2009). Emotionality norms for the Brazilian version of the Deese-Roediger-McDermott (DRM) paradigm. *Psicologia: Teoria e Pesquisa, 25*, 387-394.

Schwartz, A. J., Boduroglu, A., & Gutchess, A. H. (2014). Cross-cultural differences in categorical memory errors. *Cognitive Science, 38*, 997-1007.

Spaan, P. E. J., Raaijmakers, J. G.W., & Jonker, C. (2003). Alzheimer's disease versus normal ageing: a review of the efficiency of clinical and experimental memory measures. *Journal of Clinical and Experimental Neuropsychology*, 25, 216–233.

Stangor, C., & McMillan, D. (1992). Memory for expectancy-congruent and expectancy-incongruent information: A review of the social and social developmental literatures. *Psychological Bulletin, 111*, 42–61.

Stein, L.M., & Gomes, C.F.A. (2009). Brazilian norms for word lists: Semantic association, concreteness, word frequency, and emotionality. *Psicologia: Teoria e Pesquisa, 25*, 537-546.

Thapar, A., & McDermott, K. B. (2001). False recall and false recognition induced by presentation of associated words: Effects of retention interval and level of processing. *Memory & Cognition, 29*, 424-432.

White, C. M., Gummerum, M., Wood, S., & Hanoch, Y. (2017). Internet Safety and the Silver Surfer: The Relationship Between Gist Reasoning and Adults' Risky Online Behavior. *Journal of Behavioral Decision Making*. DOI: 10.1002/bdm.2003

White, C. M., Gummerum, M., & Hanoch, Y. (2015). Adolescents' and Young Adults' Online Risk Taking: The Role of Gist and Verbatim Representations. *Risk Analysis, 35*(8), 1407–1422. DOI: 10.1111/risa.12369.

APPENDIX

A. Slides for study phase
B. Supplementary methods for probability judgments
C. Slides for test phase
D. Repeated Measures ANOVA Output (Experiment 1).
E. Repeated Measures ANOVA Output (Experiment 2).
F. Repeated Measures ANOVA Output (Planned cultural comparison).
G. Experiment 1 - Item main effect
H. Experiment 1 - 2-way Delay x Item interaction
I. Experiment 1 - 2-way Age Group x Item interaction
J. Experiment 1 - 3-way Age Group x Delay x Item interaction
K. Experiment 2 - Item main Effect
L. Experiment 2 - 2-way Delay x Item interaction
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N. Experiment 3 - Item main effect
O. Experiment 3 - Country main effect
P. Experiment 3 - 2-way Country x Item interaction
Q. Experiment 3 - 2-way Delay x Item interaction
R. Additional analyses with fully-crossed design – Methods and Results
S. Additional analyses with fully-crossed – Supplementary Tables
T. Repeated Measures ANOVA Output (Fully-crossed design – Experiment 1).
U. Repeated Measures ANOVA Output (Fully-crossed design – Experiment 2).
V. Repeated Measures ANOVA Output (Fully-crossed design – Planned cultural comparison).

A. Slides for study phase

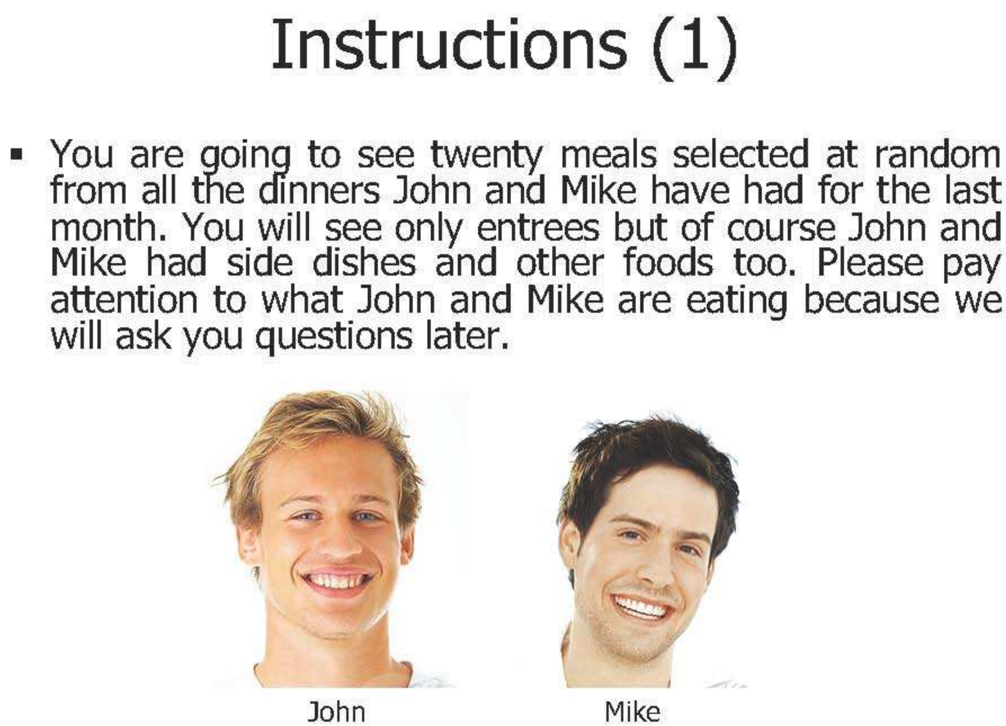

Figure A1. This slide was presented at the start of the study phase and provided instructions to the participant. The participant clicked their mouse to move on to the presentation of the targets (see below).

Figure A2. This is a real slide from the study phase. In this condition, John was the "unhealthy" character who ate only red meat.

B. Supplementary methods for probability judgments

At the starting slide of the probability judgments task, participants were shown the following instructions:

> Based on what you were presented about John and Mike's dinners last month, we would like you to answer the following question: If one night was selected at random from next month what is the probability that John and Mike will be having the following entrees? Select a number from 0% to 100%, in which:
>
> - 0% = Impossible
> - 100% = Absolutely certain.
> - Note that 50% means "as likely as not" that this will happen.

These instructions were read to the participants by the experimenter, and after the experimenter finished reading the instructions about the judgment of probabilities task, each subject was given a copy of the probability scale so that he or she did not have to memorize the instructions or the scale. Subjects then proceeded with the automated sideshow and provided a probability judgment for each individual meal or combination of meal that was on the slide for the character on the slide. There were three ways meals were presented in each slide:

1. One meal (e.g., sirloin steak)
2. One meal and other meal (e.g., sirloin steak and pork loin)
3. One meal or other meal (or both) (e.g., sirloin steak or pork loin [or both])

These combinations could contain two targets, a target and a distractor, or two distractors. There were no combinations containing identical meals. There was a total of

88 slides with test probes for each judgment of probabilities task [8 individually shown targets (T12, T5, T2, T1 x 2 characters), 4 individually shown related distractors (RA, RB x 2 characters), 4 individually shown gist inconsistent distractors (FA, FB x 2 characters), 36 conjunction pairs (18 pairs x 2 characters), 36 disjunction pairs (18 pairs x 2 characters)]. The distractors were the same as those that were used in the cued recall task, and the "Healthy" or "Unhealthy" gist of the character in the estimates was recorded to control for possible differences between the two gists. All subjects judged probabilities for past meals and for future meals, the order of which was counterbalanced.

C. Slides for test phase

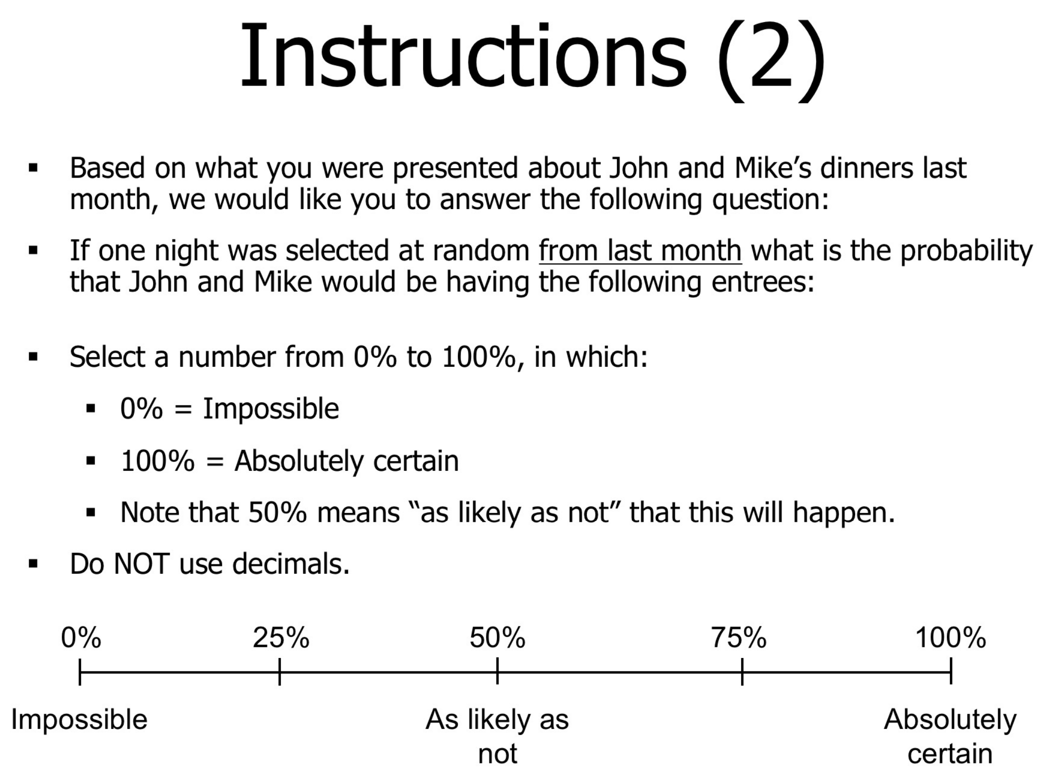

Figure A3. This slide provided instructions for the probability judgment section of the test phase (for a description of the probability judgment section, see Appendix). In this condition, participants gave judgments for the past first, whereas other participants would give judgments for the future first. Participants were given a copy of this slide so that they would not need to memorize the scale or instructions.

Instructions (3)

- Based on what you were presented about John and Mike's dinners last month, we would like you to answer the following question:
- If one night was selected at random from next month what is the probability that John and Mike will be having the following entrees:
- Select a number from 0% to 100%, in which:
  - 0% = Impossible
  - 100% = Absolutely certain
  - Note that 50% means "as likely as not" that this will happen.
- Do NOT use decimals.

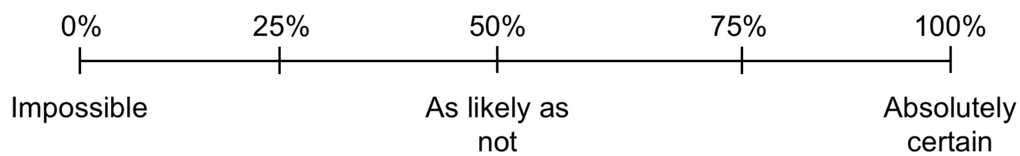

Figure A4. This slide served the same function as Figure A3, but provided instructions for the future probability judgment section of the test phase (for a description of the probability judgment section, see Appendix). Like before, participants were given a copy of this slide so that they would not need to memorize the scale or instructions.

John

1. Pork loin

Figure A5. This is a real slide from the probability judgment section of the test phase. As instructed, participants would give a probability to indicate the likelihood that, in this case, John ate or will eat pork loin, depending on whether this is the past or future section of the probability judgment task.

Instructions (4)

- Based ONLY on what you were presented with, please answer the following questions about what you REMEMBER.
- If you cannot remember exactly, make your best guess.
- Do not leave blank.

Figure A6. This slide came after the probability judgment section of the test phase and provides instructions for the memory for frequencies task. Participants clicked their mouse to move forward with the test phase.

Figure A7. This is a real slide from the memory for frequencies section of the test phase. Participants would respond to the same question on each slide. In this example, the participant would try to remember how many times Mike had tilapia and give a number accordingly. This would happen for every test probe (i.e., the targets, the related distractors, and the false distractors).

D. Repeated Measures ANOVA Output (Experiment 1).

Within-Subjects Factors

Gist	Item	Dependent Variable
1 Unhealthy	1 T12	MCT1_replaced
	2 T5	MCT2_replaced
	3 T2	MCT3_replaced
	4 T1	MCT4_replaced
	5 R	MCR_average_replaced
	6 F	MCU_average_replaced
2 Healthy	1 T12	MAT5_replaced
	2 T5	MAT6_replaced
	3 T2	MAT7_replaced
	4 T1	MAT8_replaced
	5 R	MAR_average_replaced
	6 F	MAU_average_replaced

Between-Subjects Factors

		Value Label	N
Delay Condition	1	Immediate	465
	2	Delay	397
U.S. Age Groups	1	College-Age (18-22)	770
	2	Older (59+)	92

Descriptive Statistics

	Delay Condition	U.S. Age Groups	Mean	S.D.	N
Memory Task (Healthy) Target 1 (High frequency)	Immediate	College-Age (18-22)	8.18	3.655	418
		Older (59+)	7.58	5.367	47
		Total	8.12	3.859	465
	Delay	College-Age (18-22)	6.62	3.400	352
		Older (59+)	7.51	4.934	45
		Total	6.72	3.610	397
	Total	College-Age (18-22)	7.46	3.623	770
		Older (59+)	7.54	5.132	92

		Total	7.47	3.809	862
Memory Task (Healthy) Target 2	Immediate	College-Age (18-22)	5.66	3.081	418
		Older (59+)	4.33	3.529	47
		Total	5.52	3.151	465
	Delay	College-Age (18-22)	6.62	3.430	352
		Older (59+)	6.13	4.032	45
		Total	6.56	3.501	397
	Total	College-Age (18-22)	6.10	3.278	770
		Older (59+)	5.21	3.870	92
		Total	6.00	3.355	862
Memory Task (Healthy) Target 3	Immediate	College-Age (18-22)	4.89	3.176	418
		Older (59+)	3.83	3.466	47
		Total	4.78	3.218	465
	Delay	College-Age (18-22)	5.62	3.162	352
		Older (59+)	4.33	3.736	45
		Total	5.47	3.252	397
	Total	College-Age (18-22)	5.22	3.188	770
		Older (59+)	4.08	3.589	92
		Total	5.10	3.250	862
Memory Task (Healthy) Target 4 (Low Frequency)	Immediate	College-Age (18-22)	3.11	2.597	418
		Older (59+)	2.88	2.943	47
		Total	3.09	2.632	465
	Delay	College-Age (18-22)	3.86	2.726	352
		Older (59+)	2.40	2.147	45
		Total	3.69	2.705	397
	Total	College-Age (18-22)	3.45	2.681	770
		Older (59+)	2.64	2.582	92
		Total	3.37	2.681	862
MCR_average_replaced	Immediate	College-Age (18-22)	2.4255	2.51766	418
		Older (59+)	3.3378	2.93005	47
		Total	2.5177	2.57360	465
	Delay	College-Age (18-22)	4.2430	2.79292	352
		Older (59+)	4.3111	3.70394	45
		Total	4.2507	2.90496	397
	Total	College-Age (18-22)	3.2563	2.79614	770
		Older (59+)	3.8139	3.34852	92
		Total	3.3158	2.86317	862
MCU_average_replaced	Immediate	College-Age (18-22)	1.1382	2.09446	418

		Older (59+)	1.3059	2.31190	47
		Total	1.1551	2.11538	465
	Delay	College-Age (18-22)	1.5029	2.24609	352
		Older (59+)	1.1667	2.30119	45
		Total	1.4648	2.25198	397
	Total	College-Age (18-22)	1.3049	2.17129	770
		Older (59+)	1.2378	2.29503	92
		Total	1.2977	2.18355	862
Memory Task (Unhealthy) Target 5 (High frequency)	Immediate	College-Age (18-22)	9.95	3.865	418
		Older (59+)	8.17	4.819	47
		Total	9.77	4.002	465
	Delay	College-Age (18-22)	7.31	3.917	352
		Older (59+)	6.89	4.443	45
		Total	7.26	3.976	397
	Total	College-Age (18-22)	8.74	4.103	770
		Older (59+)	7.54	4.658	92
		Total	8.62	4.179	862
Memory Task (Unhealthy) Target 6	Immediate	College-Age (18-22)	4.65	2.649	418
		Older (59+)	5.05	3.297	47
		Total	4.69	2.720	465
	Delay	College-Age (18-22)	5.33	3.256	352
		Older (59+)	4.18	2.622	45
		Total	5.20	3.209	397
	Total	College-Age (18-22)	4.96	2.960	770
		Older (59+)	4.62	3.002	92
		Total	4.92	2.965	862
Memory Task (Unhealthy) Target 7	Immediate	College-Age (18-22)	4.20	2.733	418
		Older (59+)	3.87	3.852	47
		Total	4.16	2.862	465
	Delay	College-Age (18-22)	5.13	3.236	352
		Older (59+)	4.62	3.927	45
		Total	5.07	3.319	397
	Total	College-Age (18-22)	4.62	3.007	770
		Older (59+)	4.24	3.886	92
		Total	4.58	3.112	862
Memory Task (Unhealthy) Target 8 (Low frequency)	Immediate	College-Age (18-22)	3.39	2.723	418
		Older (59+)	2.25	2.366	47
		Total	3.27	2.709	465

	Delay	College-Age (18-22)	3.74	3.056	352
		Older (59+)	2.73	2.887	45
		Total	3.63	3.051	397
	Total	College-Age (18-22)	3.55	2.884	770
		Older (59+)	2.49	2.631	92
		Total	3.43	2.875	862
MAR_average_replaced	Immediate	College-Age (18-22)	1.8415	2.16042	418
		Older (59+)	2.3223	2.63803	47
		Total	1.8901	2.21486	465
	Delay	College-Age (18-22)	2.8548	2.49735	352
		Older (59+)	3.4778	3.65401	45
		Total	2.9254	2.65531	397
	Total	College-Age (18-22)	2.3047	2.37334	770
		Older (59+)	2.8875	3.21106	92
		Total	2.3669	2.48054	862
MAU_average_replaced	Immediate	College-Age (18-22)	1.0496	2.23825	418
		Older (59+)	2.2723	4.10994	47
		Total	1.1732	2.51258	465
	Delay	College-Age (18-22)	1.4966	2.34288	352
		Older (59+)	1.7111	2.76646	45
		Total	1.5209	2.39172	397
	Total	College-Age (18-22)	1.2539	2.29601	770
		Older (59+)	1.9978	3.50980	92
		Total	1.3333	2.46235	862

Mauchly's Test of Sphericity[a]

					Epsilon[b]		
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	p	Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Gist	1.000	.000	0	.	1.000	1.000	1.000
Item	.433	716.673	14	.000	.715	.721	.200
Gist * Item	.555	504.453	14	.000	.831	.838	.200

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept + Delay Condition + U.S. Age Groups + Delay Condition * U.S. Age Groups

Within Subjects Design: Gist + Item + Gist * Item

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Source		Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Gist	Sphericity Assumed	34.731	1	34.731	7.072	.008	.008
	Greenhouse-Geisser	34.731	1.000	34.731	7.072	.008	.008
	Huynh-Feldt	34.731	1.000	34.731	7.072	.008	.008
	Lower-bound	34.731	1.000	34.731	7.072	.008	.008
Gist * Delay Condition	Sphericity Assumed	46.012	1	46.012	9.369	.002	.011
	Greenhouse-Geisser	46.012	1.000	46.012	9.369	.002	.011
	Huynh-Feldt	46.012	1.000	46.012	9.369	.002	.011
	Lower-bound	46.012	1.000	46.012	9.369	.002	.011
Gist * U.S. Age Groups	Sphericity Assumed	3.168	1	3.168	.645	.422	.001
	Greenhouse-Geisser	3.168	1.000	3.168	.645	.422	.001
	Huynh-Feldt	3.168	1.000	3.168	.645	.422	.001
	Lower-bound	3.168	1.000	3.168	.645	.422	.001
Gist * Delay Condition * U.S. Age Groups	Sphericity Assumed	.712	1	.712	.145	.704	.000
	Greenhouse-Geisser	.712	1.000	.712	.145	.704	.000
	Huynh-Feldt	.712	1.000	.712	.145	.704	.000
	Lower-bound	.712	1.000	.712	.145	.704	.000
Error(Gist)	Sphericity Assumed	4213.595	858	4.911			
	Greenhouse-Geisser	4213.595	858.000	4.911			
	Huynh-Feldt	4213.595	858.000	4.911			
	Lower-bound	4213.595	858.000	4.911			

Item	Sphericity Assumed	15806.754	5	3161.351	352.160	.000	.291
	Greenhouse-Geisser	15806.754	3.573	4423.666	352.160	.000	.291
	Huynh-Feldt	15806.754	3.603	4387.650	352.160	.000	.291
	Lower-bound	15806.754	1.000	15806.754	352.160	.000	.291
Item * Delay Condition	Sphericity Assumed	671.719	5	134.344	14.965	.000	.017
	Greenhouse-Geisser	671.719	3.573	187.987	14.965	.000	.017
	Huynh-Feldt	671.719	3.603	186.456	14.965	.000	.017
	Lower-bound	671.719	1.000	671.719	14.965	.000	.017
Item * U.S. Age Groups	Sphericity Assumed	307.194	5	61.439	6.844	.000	.008
	Greenhouse-Geisser	307.194	3.573	85.971	6.844	.000	.008
	Huynh-Feldt	307.194	3.603	85.271	6.844	.000	.008
	Lower-bound	307.194	1.000	307.194	6.844	.009	.008
Item * Delay Condition * U.S. Age Groups	Sphericity Assumed	126.999	5	25.400	2.829	.015	.003
	Greenhouse-Geisser	126.999	3.573	35.542	2.829	.028	.003
	Huynh-Feldt	126.999	3.603	35.252	2.829	.028	.003
	Lower-bound	126.999	1.000	126.999	2.829	.093	.003
Error(Item)	Sphericity Assumed	38511.479	4290	8.977			
	Greenhouse-Geisser	38511.479	3065.827	12.562			
	Huynh-Feldt	38511.479	3090.993	12.459			
	Lower-bound	38511.479	858.000	44.885			
Gist * Item	Sphericity Assumed	333.043	5	66.609	12.250	.000	.014
	Greenhouse-Geisser	333.043	4.155	80.155	12.250	.000	.014
	Huynh-Feldt	333.043	4.192	79.441	12.250	.000	.014
	Lower-bound	333.043	1.000	333.043	12.250	.000	.014
Gist * Item * Delay Condition	Sphericity Assumed	108.045	5	21.609	3.974	.001	.005

	Greenhouse-Geisser	108.045	4.155	26.004	3.974	.003	.005
	Huynh-Feldt	108.045	4.192	25.772	3.974	.003	.005
	Lower-bound	108.045	1.000	108.045	3.974	.047	.005
Gist * Item * U.S. Age Groups	Sphericity Assumed	124.387	5	24.877	4.575	.000	.005
	Greenhouse-Geisser	124.387	4.155	29.937	4.575	.001	.005
	Huynh-Feldt	124.387	4.192	29.670	4.575	.001	.005
	Lower-bound	124.387	1.000	124.387	4.575	.033	.005
Gist * Item * Delay Condition * U.S. Age Groups	Sphericity Assumed	89.778	5	17.956	3.302	.006	.004
	Greenhouse-Geisser	89.778	4.155	21.607	3.302	.009	.004
	Huynh-Feldt	89.778	4.192	21.415	3.302	.009	.004
	Lower-bound	89.778	1.000	89.778	3.302	.070	.004
Error(Gist*Item)	Sphericity Assumed	23326.366	4290	5.437			
	Greenhouse-Geisser	23326.366	3564.980	6.543			
	Huynh-Feldt	23326.366	3597.019	6.485			
	Lower-bound	23326.366	858.000	27.187			

Tests of Between-Subjects Effects

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Intercept	69389.416	1	69389.416	2202.453	.000	.720
Delay Condition	64.092	1	64.092	2.034	.154	.002
U.S. Age Groups	113.016	1	113.016	3.587	.059	.004
Delay Condition * U.S. Age Groups	4.190	1	4.190	.133	.715	.000
Error	27031.734	858	31.506			

E. Repeated Measures ANOVA Output (Experiment 2).

Within-Subjects Factors

Gist	Item	Dependent Variable
1 Unhealthy	1 T12	MCT1_replaced
	2 T5	MCT2_replaced
	3 T2	MCT3_replaced
	4 T1	MCT4_replaced
	5 R	MCR_average_replaced
	6 F	MCU_average_replaced
2 Healthy	1 T12	MAT5_replaced
	2 T5	MAT6_replaced
	3 T2	MAT7_replaced
	4 T1	MAT8_replaced
	5 R	MAR_average_replaced
	6 F	MAU_average_replaced

Between-Subjects Factors

		Value Label	N
Delay Condition	1	Immediate	148
	2	Delay	102
Brazilian Age Groups	1	College-Aged (18-22)	117
	2	Post-College (23+)	133

Descriptive Statistics

	Delay Condition	Brazilian Age Groups	Mean	S.D.	N
Memory Task (Healthy) Target 1 (High frequency)	Immediate	College-Aged (18-22)	10.17	4.714	82
		Post-College (23+)	8.50	3.630	66
		Total	9.43	4.332	148
	Delay	College-Aged (18-22)	6.40	3.957	35
		Post-College (23+)	7.16	3.828	67
		Total	6.90	3.870	102
	Total	College-Aged (18-22)	9.04	4.807	117

		Post-College (23+)	7.83	3.777	133
		Total	8.40	4.324	250
Memory Task (Healthy) Target 2	Immediate	College-Aged (18-22)	4.83	2.730	82
		Post-College (23+)	4.86	2.385	66
		Total	4.84	2.573	148
	Delay	College-Aged (18-22)	5.60	3.483	35
		Post-College (23+)	5.55	3.225	67
		Total	5.57	3.299	102
	Total	College-Aged (18-22)	5.06	2.981	117
		Post-College (23+)	5.21	2.850	133
		Total	5.14	2.907	250
Memory Task (Healthy) Target 3	Immediate	College-Aged (18-22)	4.07	2.675	82
		Post-College (23+)	4.18	3.220	66
		Total	4.12	2.921	148
	Delay	College-Aged (18-22)	6.11	3.428	35
		Post-College (23+)	5.04	3.179	67
		Total	5.41	3.290	102
	Total	College-Aged (18-22)	4.68	3.053	117
		Post-College (23+)	4.61	3.216	133
		Total	4.65	3.135	250
Memory Task (Healthy) Target 4 (Low Frequency)	Immediate	College-Aged (18-22)	2.43	2.160	82
		Post-College (23+)	2.23	2.429	66
		Total	2.34	2.278	148
	Delay	College-Aged (18-22)	2.51	2.571	35
		Post-College (23+)	2.57	2.432	67
		Total	2.55	2.468	102
	Total	College-Aged (18-22)	2.45	2.280	117
		Post-College (23+)	2.40	2.428	133
		Total	2.42	2.355	250
MCR_average_replaced	Immediate	College-Aged (18-22)	1.7500	2.17910	82
		Post-College (23+)	1.5909	2.08642	66
		Total	1.6791	2.13252	148
	Delay	College-Aged (18-22)	3.1143	2.52658	35
		Post-College (23+)	3.1791	2.74787	67
		Total	3.1569	2.66159	102
	Total	College-Aged (18-22)	2.1581	2.36228	117
		Post-College (23+)	2.3910	2.56014	133

		Total	2.2820	2.46735	250
MCU_average_replaced	Immediate	College-Aged (18-22)	.3354	1.20456	82
		Post-College (23+)	.4015	1.43907	66
		Total	.3649	1.31008	148
	Delay	College-Aged (18-22)	.4429	.88924	35
		Post-College (23+)	.7313	1.70411	67
		Total	.6324	1.47743	102
	Total	College-Aged (18-22)	.3675	1.11686	117
		Post-College (23+)	.5677	1.58088	133
		Total	.4740	1.38419	250
Memory Task (Unhealthy) Target 5 (High frequency)	Immediate	College-Aged (18-22)	8.99	4.526	82
		Post-College (23+)	7.73	3.484	66
		Total	8.43	4.129	148
	Delay	College-Aged (18-22)	6.34	3.548	35
		Post-College (23+)	6.43	3.764	67
		Total	6.40	3.674	102
	Total	College-Aged (18-22)	8.20	4.412	117
		Post-College (23+)	7.07	3.673	133
		Total	7.60	4.067	250
Memory Task (Unhealthy) Target 6	Immediate	College-Aged (18-22)	4.60	2.845	82
		Post-College (23+)	4.38	2.217	66
		Total	4.50	2.578	148
	Delay	College-Aged (18-22)	5.00	2.722	35
		Post-College (23+)	4.91	3.274	67
		Total	4.94	3.082	102
	Total	College-Aged (18-22)	4.72	2.803	117
		Post-College (23+)	4.65	2.802	133
		Total	4.68	2.797	250
Memory Task (Unhealthy) Target 7	Immediate	College-Aged (18-22)	3.90	2.883	82
		Post-College (23+)	3.75	1.980	66
		Total	3.83	2.514	148
	Delay	College-Aged (18-22)	4.91	2.672	35
		Post-College (23+)	5.06	3.289	67
		Total	5.01	3.078	102
	Total	College-Aged (18-22)	4.21	2.848	117
		Post-College (23+)	4.41	2.788	133
		Total	4.31	2.812	250
	Immediate	College-Aged (18-22)	2.52	2.144	82

Memory Task (Unhealthy) Target 8 (Low frequency)		Post-College (23+)	2.18	1.456	66
		Total	2.37	1.871	148
	Delay	College-Aged (18-22)	2.69	2.111	35
		Post-College (23+)	3.01	2.788	67
		Total	2.90	2.570	102
	Total	College-Aged (18-22)	2.57	2.127	117
		Post-College (23+)	2.60	2.259	133
		Total	2.59	2.194	250
MAR_average_replaced	Immediate	College-Aged (18-22)	2.6037	3.11779	82
		Post-College (23+)	1.5000	2.11041	66
		Total	2.1115	2.76200	148
	Delay	College-Aged (18-22)	2.8143	2.19654	35
		Post-College (23+)	3.0672	2.80543	67
		Total	2.9804	2.60419	102
	Total	College-Aged (18-22)	2.6667	2.86552	117
		Post-College (23+)	2.2895	2.59750	133
		Total	2.4660	2.72720	250
MAU_average_replaced	Immediate	College-Aged (18-22)	.8841	2.48861	82
		Post-College (23+)	.5881	1.69851	66
		Total	.7521	2.17026	148
	Delay	College-Aged (18-22)	.7519	1.42668	35
		Post-College (23+)	.8582	1.68731	67
		Total	.8217	1.59630	102
	Total	College-Aged (18-22)	.8446	2.21920	117
		Post-College (23+)	.7242	1.69189	133
		Total	.7805	1.95331	250

Mauchly's Test of Sphericity[a]

					Epsilon[b]		
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	p	Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Gist	1.000	.000	0	.	1.000	1.000	1.000
Item	.327	272.968	14	.000	.659	.677	.200
Gist * Item	.402	222.576	14	.000	.756	.779	.200

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept + Delay Condition + Brazilian Age Groups + Delay Condition * Brazilian Age Groups
Within Subjects Design: Gist + Item + Gist * Item

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Source		Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Gist	Sphericity Assumed	21.775	1	21.775	5.776	.017	.023
	Greenhouse-Geisser	21.775	1.000	21.775	5.776	.017	.023
	Huynh-Feldt	21.775	1.000	21.775	5.776	.017	.023
	Lower-bound	21.775	1.000	21.775	5.776	.017	.023
Gist * Delay Condition	Sphericity Assumed	.843	1	.843	.224	.637	.001
	Greenhouse-Geisser	.843	1.000	.843	.224	.637	.001
	Huynh-Feldt	.843	1.000	.843	.224	.637	.001
	Lower-bound	.843	1.000	.843	.224	.637	.001
Gist * Brazilian Age Groups	Sphericity Assumed	.713	1	.713	.189	.664	.001
	Greenhouse-Geisser	.713	1.000	.713	.189	.664	.001
	Huynh-Feldt	.713	1.000	.713	.189	.664	.001
	Lower-bound	.713	1.000	.713	.189	.664	.001
Gist * Delay Condition * Brazilian Age Groups	Sphericity Assumed	6.419	1	6.419	1.702	.193	.007
	Greenhouse-Geisser	6.419	1.000	6.419	1.702	.193	.007
	Huynh-Feldt	6.419	1.000	6.419	1.702	.193	.007
	Lower-bound	6.419	1.000	6.419	1.702	.193	.007
Error(Gist)	Sphericity Assumed	927.453	246	3.770			

	Greenhouse-Geisser	927.453	246.000	3.770			
	Huynh-Feldt	927.453	246.000	3.770			
	Lower-bound	927.453	246.000	3.770			
Item	Sphericity Assumed	13966.049	5	2793.210	349.012	.000	.587
	Greenhouse-Geisser	13966.049	3.293	4240.499	349.012	.000	.587
	Huynh-Feldt	13966.049	3.384	4126.811	349.012	.000	.587
	Lower-bound	13966.049	1.000	13966.049	349.012	.000	.587
Item * Delay Condition	Sphericity Assumed	952.962	5	190.592	23.815	.000	.088
	Greenhouse-Geisser	952.962	3.293	289.347	23.815	.000	.088
	Huynh-Feldt	952.962	3.384	281.590	23.815	.000	.088
	Lower-bound	952.962	1.000	952.962	23.815	.000	.088
Item * Brazilian Age Groups	Sphericity Assumed	22.814	5	4.563	.570	.723	.002
	Greenhouse-Geisser	22.814	3.293	6.927	.570	.651	.002
	Huynh-Feldt	22.814	3.384	6.741	.570	.656	.002
	Lower-bound	22.814	1.000	22.814	.570	.451	.002
Item * Delay Condition * Brazilian Age Groups	Sphericity Assumed	89.314	5	17.863	2.232	.049	.009
	Greenhouse-Geisser	89.314	3.293	27.118	2.232	.077	.009
	Huynh-Feldt	89.314	3.384	26.391	2.232	.075	.009
	Lower-bound	89.314	1.000	89.314	2.232	.136	.009
Error(Item)	Sphericity Assumed	9843.925	1230	8.003			
	Greenhouse-Geisser	9843.925	810.199	12.150			
	Huynh-Feldt	9843.925	832.519	11.824			
	Lower-bound	9843.925	246.000	40.016			
Gist * Item	Sphericity Assumed	94.960	5	18.992	4.077	.001	.016
	Greenhouse-Geisser	94.960	3.780	25.122	4.077	.003	.016

	Huynh-Feldt	94.960	3.893	24.392	4.077	.003	.016
	Lower-bound	94.960	1.000	94.960	4.077	.045	.016
Gist * Item * Delay Condition	Sphericity Assumed	25.588	5	5.118	1.099	.359	.004
	Greenhouse-Geisser	25.588	3.780	6.770	1.099	.355	.004
	Huynh-Feldt	25.588	3.893	6.573	1.099	.355	.004
	Lower-bound	25.588	1.000	25.588	1.099	.296	.004
Gist * Item * Brazilian Age Groups	Sphericity Assumed	13.133	5	2.627	.564	.728	.002
	Greenhouse-Geisser	13.133	3.780	3.474	.564	.679	.002
	Huynh-Feldt	13.133	3.893	3.373	.564	.684	.002
	Lower-bound	13.133	1.000	13.133	.564	.453	.002
Gist * Item * Delay Condition * Brazilian Age Groups	Sphericity Assumed	28.378	5	5.676	1.218	.298	.005
	Greenhouse-Geisser	28.378	3.780	7.508	1.218	.302	.005
	Huynh-Feldt	28.378	3.893	7.289	1.218	.301	.005
	Lower-bound	28.378	1.000	28.378	1.218	.271	.005
Error(Gist*Item)	Sphericity Assumed	5729.481	1230	4.658			
	Greenhouse-Geisser	5729.481	929.869	6.162			
	Huynh-Feldt	5729.481	957.705	5.983			
	Lower-bound	5729.481	246.000	23.291			

Tests of Between-Subjects Effects

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Intercept	39496.393	1	39496.393	1431.047	.000	.853
Delay Condition	32.957	1	32.957	1.194	.276	.005
Brazilian Age Groups	21.959	1	21.959	.796	.373	.003
Delay Condition * Brazilian Age Groups	43.405	1	43.405	1.573	.211	.006

Error	6789.512	246	27.600

F. Repeated Measures ANOVA Output (Planned cultural comparison).

Within-Subjects Factors

Gist	Item	Dependent Variable
1 Unhealthy	1 T12	MCT1_replaced
	2 T5	MCT2_replaced
	3 T2	MCT3_replaced
	4 T1	MCT4_replaced
	5 R	MCR_average_replaced
	6 F	MCU_average_replaced
2 Healthy	1 T12	MAT5_replaced
	2 T5	MAT6_replaced
	3 T2	MAT7_replaced
	4 T1	MAT8_replaced
	5 R	MAR_average_replaced
	6 F	MAU_average_replaced

Between-Subjects Factors

		Value Label	N
Country	1.00	US	770
	2.00	Brazil	117
Delay Condition	1.00	Immediate	500
	2.00	Delay	387

Descriptive Statistics

	Country	Delay Condition	Mean	S.D.	N
Memory Task (Healthy) Target 1 (High frequency)	US	Immediate	8.18	3.655	418
		Delay	6.62	3.400	352
		Total	7.46	3.623	770
	Brazil	Immediate	10.17	4.714	82
		Delay	6.40	3.957	35
		Total	9.04	4.807	117
	Total	Immediate	8.50	3.913	500

		Delay	6.60	3.449	387
		Total	7.67	3.835	887
Memory Task (Healthy) Target 2	US	Immediate	5.66	3.081	418
		Delay	6.62	3.430	352
		Total	6.10	3.278	770
	Brazil	Immediate	4.83	2.730	82
		Delay	5.60	3.483	35
		Total	5.06	2.981	117
	Total	Immediate	5.52	3.039	500
		Delay	6.53	3.443	387
		Total	5.96	3.258	887
Memory Task (Healthy) Target 3	US	Immediate	4.89	3.176	418
		Delay	5.62	3.162	352
		Total	5.22	3.188	770
	Brazil	Immediate	4.07	2.675	82
		Delay	6.11	3.428	35
		Total	4.68	3.053	117
	Total	Immediate	4.76	3.112	500
		Delay	5.66	3.185	387
		Total	5.15	3.174	887
Memory Task (Healthy) Target 4 (Low Frequency)	US	Immediate	3.11	2.597	418
		Delay	3.86	2.726	352
		Total	3.45	2.681	770
	Brazil	Immediate	2.43	2.160	82
		Delay	2.51	2.571	35
		Total	2.45	2.280	117
	Total	Immediate	3.00	2.541	500
		Delay	3.74	2.737	387
		Total	3.32	2.652	887
MCR_average_replaced	US	Immediate	2.4255	2.51766	418
		Delay	4.2430	2.79292	352
		Total	3.2563	2.79614	770
	Brazil	Immediate	1.7500	2.17910	82
		Delay	3.1143	2.52658	35
		Total	2.1581	2.36228	117
	Total	Immediate	2.3147	2.47598	500
		Delay	4.1409	2.78576	387

		Total	3.1115	2.76674	887
MCU_average_replaced	US	Immediate	1.1382	2.09446	418
		Delay	1.5029	2.24609	352
		Total	1.3049	2.17129	770
	Brazil	Immediate	.3354	1.20456	82
		Delay	.4429	.88924	35
		Total	.3675	1.11686	117
	Total	Immediate	1.0065	1.99748	500
		Delay	1.4070	2.17940	387
		Total	1.1813	2.08710	887
Memory Task (Unhealthy) Target 5 (High frequency)	US	Immediate	9.95	3.865	418
		Delay	7.31	3.917	352
		Total	8.74	4.103	770
	Brazil	Immediate	8.99	4.526	82
		Delay	6.34	3.548	35
		Total	8.20	4.412	117
	Total	Immediate	9.79	3.992	500
		Delay	7.22	3.891	387
		Total	8.67	4.147	887
Memory Task (Unhealthy) Target 6	US	Immediate	4.65	2.649	418
		Delay	5.33	3.256	352
		Total	4.96	2.960	770
	Brazil	Immediate	4.60	2.845	82
		Delay	5.00	2.722	35
		Total	4.72	2.803	117
	Total	Immediate	4.64	2.680	500
		Delay	5.30	3.210	387
		Total	4.93	2.939	887
Memory Task (Unhealthy) Target 7	US	Immediate	4.20	2.733	418
		Delay	5.13	3.236	352
		Total	4.62	3.007	770
	Brazil	Immediate	3.90	2.883	82
		Delay	4.91	2.672	35
		Total	4.21	2.848	117
	Total	Immediate	4.15	2.757	500
		Delay	5.11	3.186	387
		Total	4.57	2.988	887
	US	Immediate	3.39	2.723	418

Memory Task (Unhealthy) Target 8 (Low frequency)		Delay	3.74	3.056	352
		Total	3.55	2.884	770
	Brazil	Immediate	2.52	2.144	82
		Delay	2.69	2.111	35
		Total	2.57	2.127	117
	Total	Immediate	3.24	2.654	500
		Delay	3.64	2.996	387
		Total	3.42	2.814	887
MAR_average_replaced	US	Immediate	1.8415	2.16042	418
		Delay	2.8548	2.49735	352
		Total	2.3047	2.37334	770
	Brazil	Immediate	2.6037	3.11779	82
		Delay	2.8143	2.19654	35
		Total	2.6667	2.86552	117
	Total	Immediate	1.9665	2.35757	500
		Delay	2.8511	2.46908	387
		Total	2.3525	2.44520	887
MAU_average_replaced	US	Immediate	1.0496	2.23825	418
		Delay	1.4966	2.34288	352
		Total	1.2539	2.29601	770
	Brazil	Immediate	.8841	2.48861	82
		Delay	.7519	1.42668	35
		Total	.8446	2.21920	117
	Total	Immediate	1.0225	2.27938	500
		Delay	1.4293	2.28394	387
		Total	1.1999	2.28900	887

Mauchly's Test of Sphericity[a]

					Epsilon[b]		
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	p	Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Gist	1.000	.000	0	.	1.000	1.000	1.000
Item	.422	759.936	14	.000	.718	.723	.200
Gist * Item	.540	543.157	14	.000	.816	.823	.200

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept + Country + Delay Condition + Country * Delay Condition
Within Subjects Design: Gist + Item + Gist * Item

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Source		Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Gist	Sphericity Assumed	39.950	1	39.950	8.754	.003	.010
	Greenhouse-Geisser	39.950	1.000	39.950	8.754	.003	.010
	Huynh-Feldt	39.950	1.000	39.950	8.754	.003	.010
	Lower-bound	39.950	1.000	39.950	8.754	.003	.010
Gist * Country	Sphericity Assumed	2.488	1	2.488	.545	.461	.001
	Greenhouse-Geisser	2.488	1.000	2.488	.545	.461	.001
	Huynh-Feldt	2.488	1.000	2.488	.545	.461	.001
	Lower-bound	2.488	1.000	2.488	.545	.461	.001
Gist * Delay Condition	Sphericity Assumed	27.026	1	27.026	5.922	.015	.007
	Greenhouse-Geisser	27.026	1.000	27.026	5.922	.015	.007
	Huynh-Feldt	27.026	1.000	27.026	5.922	.015	.007
	Lower-bound	27.026	1.000	27.026	5.922	.015	.007
Gist * Country * Delay Condition	Sphericity Assumed	.837	1	.837	.183	.669	.000
	Greenhouse-Geisser	.837	1.000	.837	.183	.669	.000
	Huynh-Feldt	.837	1.000	.837	.183	.669	.000
	Lower-bound	.837	1.000	.837	.183	.669	.000
Error(Gist)	Sphericity Assumed	4029.694	883	4.564			

	Greenhouse-Geisser	4029.694	883.000	4.564			
	Huynh-Feldt	4029.694	883.000	4.564			
	Lower-bound	4029.694	883.000	4.564			
Item	Sphericity Assumed	20966.673	5	4193.335	494.267	.000	.359
	Greenhouse-Geisser	20966.673	3.588	5842.821	494.267	.000	.359
	Huynh-Feldt	20966.673	3.617	5796.477	494.267	.000	.359
	Lower-bound	20966.673	1.000	20966.673	494.267	.000	.359
Item * Country	Sphericity Assumed	107.674	5	21.535	2.538	.027	.003
	Greenhouse-Geisser	107.674	3.588	30.006	2.538	.044	.003
	Huynh-Feldt	107.674	3.617	29.768	2.538	.044	.003
	Lower-bound	107.674	1.000	107.674	2.538	.111	.003
Item * Delay Condition	Sphericity Assumed	1768.429	5	353.686	41.689	.000	.045
	Greenhouse-Geisser	1768.429	3.588	492.812	41.689	.000	.045
	Huynh-Feldt	1768.429	3.617	488.903	41.689	.000	.045
	Lower-bound	1768.429	1.000	1768.429	41.689	.000	.045
Item * Country * Delay Condition	Sphericity Assumed	76.999	5	15.400	1.815	.106	.002
	Greenhouse-Geisser	76.999	3.588	21.457	1.815	.131	.002
	Huynh-Feldt	76.999	3.617	21.287	1.815	.130	.002
	Lower-bound	76.999	1.000	76.999	1.815	.178	.002
Error(Item)	Sphericity Assumed	37456.628	4415	8.484			
	Greenhouse-Geisser	37456.628	3168.601	11.821			
	Huynh-Feldt	37456.628	3193.935	11.727			
	Lower-bound	37456.628	883.000	42.420			
Gist * Item	Sphericity Assumed	184.279	5	36.856	6.967	.000	.008

	Greenhouse-Geisser	184.279	4.079	45.178	6.967	.000	.008
	Huynh-Feldt	184.279	4.114	44.791	6.967	.000	.008
	Lower-bound	184.279	1.000	184.279	6.967	.008	.008
Gist * Item * Country	Sphericity Assumed	250.137	5	50.027	9.457	.000	.011
	Greenhouse-Geisser	250.137	4.079	61.324	9.457	.000	.011
	Huynh-Feldt	250.137	4.114	60.799	9.457	.000	.011
	Lower-bound	250.137	1.000	250.137	9.457	.002	.011
Gist * Item * Delay Condition	Sphericity Assumed	28.022	5	5.604	1.059	.381	.001
	Greenhouse-Geisser	28.022	4.079	6.870	1.059	.376	.001
	Huynh-Feldt	28.022	4.114	6.811	1.059	.376	.001
	Lower-bound	28.022	1.000	28.022	1.059	.304	.001
Gist * Item * Country * Delay Condition	Sphericity Assumed	73.437	5	14.687	2.776	.016	.003
	Greenhouse-Geisser	73.437	4.079	18.004	2.776	.025	.003
	Huynh-Feldt	73.437	4.114	17.850	2.776	.024	.003
	Lower-bound	73.437	1.000	73.437	2.776	.096	.003
Error(Gist*Item)	Sphericity Assumed	23355.890	4415	5.290			
	Greenhouse-Geisser	23355.890	3601.721	6.485			
	Huynh-Feldt	23355.890	3632.819	6.429			
	Lower-bound	23355.890	883.000	26.451			

Tests of Between-Subjects Effects

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Intercept	71427.685	1	71427.685	2407.458	.000	.732
Country	219.382	1	219.382	7.394	.007	.008
Delay Condition	21.601	1	21.601	.728	.394	.001

Country * Delay Condition	32.482	1	32.482	1.095	.296	.001
Error	26198.030	883	29.669			

G. Experiment 1 - Item main effect

Estimates

Item	Mean	S.E.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
1 T12	7.775	.179	7.423	8.127
2 T5	5.242	.142	4.963	5.522
3 T2	4.561	.140	4.286	4.837
4 T1	3.044	.122	2.804	3.285
5 R	3.102	.126	2.855	3.349
6 F	1.455	.116	1.228	1.683

Pairwise Comparisons

(I) Item	(J) Item	Mean Difference (I-J)	S.E.	p	95% Confidence Interval for Difference[b] Lower Bound	95% Confidence Interval for Difference[b] Upper Bound
1 T12	2 T5	2.533*	.201	.000	2.138	2.927
	3 T2	3.214*	.205	.000	2.811	3.616
	4 T1	4.731*	.207	.000	4.325	5.137
	5 R	4.673*	.208	.000	4.265	5.082
	6 F	6.320*	.217	.000	5.893	6.746
2 T5	1 T12	-2.533*	.201	.000	-2.927	-2.138
	3 T2	.681*	.152	.000	.383	.979
	4 T1	2.198*	.152	.000	1.899	2.497
	5 R	2.141*	.146	.000	1.854	2.427
	6 F	3.787*	.159	.000	3.474	4.099
3 T2	1 T12	-3.214*	.205	.000	-3.616	-2.811
	2 T5	-.681*	.152	.000	-.979	-.383
	4 T1	1.517*	.136	.000	1.249	1.784
	5 R	1.459*	.124	.000	1.217	1.702
	6 F	3.106*	.150	.000	2.811	3.400
4 T1	1 T12	-4.731*	.207	.000	-5.137	-4.325
	2 T5	-2.198*	.152	.000	-2.497	-1.899
	3 T2	-1.517*	.136	.000	-1.784	-1.249
	5 R	-.057	.118	.627	-.288	.174
	6 F	1.589*	.133	.000	1.327	1.851
5 R	1 T12	-4.673*	.208	.000	-5.082	-4.265
	2 T5	-2.141*	.146	.000	-2.427	-1.854

	3 T2	-1.459*	.124	.000	-1.702	-1.217
	4 T1	.057	.118	.627	-.174	.288
	6 F	1.646*	.116	.000	1.418	1.875
6 F	1 T12	-6.320*	.217	.000	-6.746	-5.893
	2 T5	-3.787*	.159	.000	-4.099	-3.474
	3 T2	-3.106*	.150	.000	-3.400	-2.811
	4 T1	-1.589*	.133	.000	-1.851	-1.327
	5 R	-1.646*	.116	.000	-1.875	-1.418

Based on estimated marginal means

H. Experiment 1 - 2-way Delay x Item interaction

Estimates

Delay Condition	Item	Mean	S.E.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Immediate	1 T12	8.468	.250	7.978	8.959
	2 T5	4.920	.198	4.530	5.309
	3 T2	4.197	.196	3.814	4.581
	4 T1	2.906	.171	2.571	3.241
	5 R	2.482	.175	2.138	2.826
	6 F	1.441	.162	1.124	1.759
Delay	1 T12	7.082	.257	6.577	7.586
	2 T5	5.565	.204	5.164	5.966
	3 T2	4.925	.201	4.530	5.320
	4 T1	3.183	.176	2.838	3.527
	5 R	3.722	.180	3.368	4.076
	6 F	1.469	.166	1.143	1.796

Pairwise Comparisons

Delay Condition	(I) Item	(J) Item	Mean Difference (I-J)	S.E.	p	95% Confidence Interval for Difference[b] Lower Bound	95% Confidence Interval for Difference[b] Upper Bound
Immediate	1 T12	2 T5	3.549*	.280	.000	2.999	4.098
		3 T2	4.271*	.286	.000	3.710	4.832
		4 T1	5.562*	.288	.000	4.996	6.128
		5 R	5.986*	.290	.000	5.417	6.556
		6 F	7.027*	.303	.000	6.432	7.621
	2 T5	1 T12	-3.549*	.280	.000	-4.098	-2.999
		3 T2	.722*	.212	.001	.307	1.138
		4 T1	2.014*	.212	.000	1.597	2.431
		5 R	2.438*	.203	.000	2.039	2.837
		6 F	3.478*	.222	.000	3.043	3.914
	3 T2	1 T12	-4.271*	.286	.000	-4.832	-3.710
		2 T5	-.722*	.212	.001	-1.138	-.307
		4 T1	1.291*	.190	.000	.919	1.664

		5 R	1.716*	.172	.000	1.377	2.054
		6 F	2.756*	.209	.000	2.346	3.166
	4 T1	1 T12	-5.562*	.288	.000	-6.128	-4.996
		2 T5	-2.014*	.212	.000	-2.431	-1.597
		3 T2	-1.291*	.190	.000	-1.664	-.919
		5 R	.424*	.164	.010	.102	.746
		6 F	1.465*	.186	.000	1.100	1.829
	5 R	1 T12	-5.986*	.290	.000	-6.556	-5.417
		2 T5	-2.438*	.203	.000	-2.837	-2.039
		3 T2	-1.716*	.172	.000	-2.054	-1.377
		4 T1	-.424*	.164	.010	-.746	-.102
		6 F	1.040*	.162	.000	.722	1.359
	6 F	1 T12	-7.027*	.303	.000	-7.621	-6.432
		2 T5	-3.478*	.222	.000	-3.914	-3.043
		3 T2	-2.756*	.209	.000	-3.166	-2.346
		4 T1	-1.465*	.186	.000	-1.829	-1.100
		5 R	-1.040*	.162	.000	-1.359	-.722
Delay	1 T12	2 T5	1.517*	.288	.000	.951	2.083
		3 T2	2.157*	.294	.000	1.580	2.734
		4 T1	3.899*	.297	.000	3.317	4.481
		5 R	3.360*	.299	.000	2.774	3.946
		6 F	5.612*	.312	.000	5.001	6.224
	2 T5	1 T12	-1.517*	.288	.000	-2.083	-.951
		3 T2	.640*	.218	.003	.212	1.068
		4 T1	2.382*	.219	.000	1.953	2.811
		5 R	1.843*	.209	.000	1.433	2.253
		6 F	4.095*	.228	.000	3.647	4.544
	3 T2	1 T12	-2.157*	.294	.000	-2.734	-1.580
		2 T5	-.640*	.218	.003	-1.068	-.212
		4 T1	1.742*	.195	.000	1.358	2.125
		5 R	1.203*	.177	.000	.855	1.551
		6 F	3.455*	.215	.000	3.033	3.877
	4 T1	1 T12	-3.899*	.297	.000	-4.481	-3.317
		2 T5	-2.382*	.219	.000	-2.811	-1.953

	3 T2	-1.742*	.195	.000	-2.125	-1.358
	5 R	-.539*	.169	.001	-.870	-.208
	6 F	1.714*	.191	.000	1.338	2.089
5 R	1 T12	-3.360*	.299	.000	-3.946	-2.774
	2 T5	-1.843*	.209	.000	-2.253	-1.433
	3 T2	-1.203*	.177	.000	-1.551	-.855
	4 T1	.539*	.169	.001	.208	.870
	6 F	2.252*	.167	.000	1.925	2.580
6 F	1 T12	-5.612*	.312	.000	-6.224	-5.001
	2 T5	-4.095*	.228	.000	-4.544	-3.647
	3 T2	-3.455*	.215	.000	-3.877	-3.033
	4 T1	-1.714*	.191	.000	-2.089	-1.338
	5 R	-2.252*	.167	.000	-2.580	-1.925

Based on estimated marginal means

I. Experiment 1 - 2-way Age Group x Item interaction

Estimates

				95% Confidence Interval	
U.S. Age Groups	Item	Mean	S.E.	Lower Bound	Upper Bound
College-Age (18-22)	1 T12	8.014	.117	7.783	8.244
	2 T5	5.563	.093	5.380	5.746
	3 T2	4.957	.092	4.776	5.137
	4 T1	3.524	.080	3.367	3.682
	5 R	2.841	.082	2.679	3.003
	6 F	1.297	.076	1.148	1.446
Older (59+)	1 T12	7.536	.339	6.872	8.201
	2 T5	4.921	.269	4.393	5.449
	3 T2	4.165	.265	3.645	4.686
	4 T1	2.565	.231	2.111	3.019
	5 R	3.362	.238	2.896	3.829
	6 F	1.614	.219	1.184	2.044

Pairwise Comparisons

						95% Confidence Interval for Difference[b]	
U.S. Age Groups	(I) Item	(J) Item	Mean Difference (I-J)	S.E.	p	Lower Bound	Upper Bound
College-Age (18-22)	1 T12	2 T5	2.450*	.132	.000	2.192	2.709
		3 T2	3.057*	.134	.000	2.793	3.321
		4 T1	4.489*	.136	.000	4.223	4.756
		5 R	5.172*	.136	.000	4.905	5.440
		6 F	6.717*	.142	.000	6.437	6.996
	2 T5	1 T12	-2.450*	.132	.000	-2.709	-2.192
		3 T2	.606*	.100	.000	.411	.802
		4 T1	2.039*	.100	.000	1.843	2.235
		5 R	2.722*	.096	.000	2.535	2.910
		6 F	4.266*	.104	.000	4.062	4.471
	3 T2	1 T12	-3.057*	.134	.000	-3.321	-2.793
		2 T5	-.606*	.100	.000	-.802	-.411
		4 T1	1.433*	.089	.000	1.257	1.608

		5 R	2.116*	.081	.000	1.957	2.275
		6 F	3.660*	.098	.000	3.467	3.853
	4 T1	1 T12	-4.489*	.136	.000	-4.756	-4.223
		2 T5	-2.039*	.100	.000	-2.235	-1.843
		3 T2	-1.433*	.089	.000	-1.608	-1.257
		5 R	.683*	.077	.000	.532	.834
		6 F	2.227*	.087	.000	2.056	2.399
	5 R	1 T12	-5.172*	.136	.000	-5.440	-4.905
		2 T5	-2.722*	.096	.000	-2.910	-2.535
		3 T2	-2.116*	.081	.000	-2.275	-1.957
		4 T1	-.683*	.077	.000	-.834	-.532
		6 F	1.544*	.076	.000	1.395	1.694
	6 F	1 T12	-6.717*	.142	.000	-6.996	-6.437
		2 T5	-4.266*	.104	.000	-4.471	-4.062
		3 T2	-3.660*	.098	.000	-3.853	-3.467
		4 T1	-2.227*	.087	.000	-2.399	-2.056
		5 R	-1.544*	.076	.000	-1.694	-1.395
Older (59+)	1 T12	2 T5	2.615*	.380	.000	1.870	3.360
		3 T2	3.371*	.388	.000	2.611	4.132
		4 T1	4.972*	.391	.000	4.205	5.739
		5 R	4.174*	.393	.000	3.402	4.946
		6 F	5.922*	.411	.000	5.117	6.728
	2 T5	1 T12	-2.615*	.380	.000	-3.360	-1.870
		3 T2	.756*	.287	.009	.193	1.319
		4 T1	2.357*	.288	.000	1.791	2.922
		5 R	1.559*	.275	.000	1.018	2.100
		6 F	3.307*	.301	.000	2.717	3.897
	3 T2	1 T12	-3.371*	.388	.000	-4.132	-2.611
		2 T5	-.756*	.287	.009	-1.319	-.193
		4 T1	1.601*	.257	.000	1.095	2.106
		5 R	.803*	.234	.001	.344	1.262
		6 F	2.551*	.283	.000	1.995	3.107
	4 T1	1 T12	-4.972*	.391	.000	-5.739	-4.205
		2 T5	-2.357*	.288	.000	-2.922	-1.791

	3 T2	-1.601*	.257	.000	-2.106	-1.095
	5 R	-.798*	.222	.000	-1.234	-.361
	6 F	.951*	.252	.000	.456	1.445
5 R	1 T12	-4.174*	.393	.000	-4.946	-3.402
	2 T5	-1.559*	.275	.000	-2.100	-1.018
	3 T2	-.803*	.234	.001	-1.262	-.344
	4 T1	.798*	.222	.000	.361	1.234
	6 F	1.748*	.220	.000	1.317	2.180
6 F	1 T12	-5.922*	.411	.000	-6.728	-5.117
	2 T5	-3.307*	.301	.000	-3.897	-2.717
	3 T2	-2.551*	.283	.000	-3.107	-1.995
	4 T1	-.951*	.252	.000	-1.445	-.456
	5 R	-1.748*	.220	.000	-2.180	-1.317

Based on estimated marginal means

J. Experiment 1 - 3-way Age Group x Delay x Item interaction

Estimates

Delay Condition	U.S. Age Groups	Item	Mean	S.E.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Immediate	College-Age (18-22)	1 T12	9.064	.159	8.752	9.376
		2 T5	5.153	.126	4.905	5.400
		3 T2	4.542	.124	4.298	4.786
		4 T1	3.249	.108	3.037	3.462
		5 R	2.134	.111	1.915	2.352
		6 F	1.094	.103	.892	1.296
	Older (59+)	1 T12	7.873	.474	6.943	8.803
		2 T5	4.687	.376	3.948	5.425
		3 T2	3.853	.371	3.125	4.581
		4 T1	2.563	.323	1.928	3.197
		5 R	2.830	.332	2.178	3.482
		6 F	1.789	.307	1.187	2.391
Delay	College-Age (18-22)	1 T12	6.964	.173	6.624	7.303
		2 T5	5.974	.137	5.704	6.244
		3 T2	5.372	.136	5.106	5.638
		4 T1	3.799	.118	3.567	4.031
		5 R	3.549	.121	3.311	3.787
		6 F	1.500	.112	1.280	1.720
	Older (59+)	1 T12	7.200	.484	6.250	8.150
		2 T5	5.156	.384	4.401	5.910
		3 T2	4.478	.379	3.734	5.222
		4 T1	2.567	.331	1.918	3.215
		5 R	3.894	.340	3.228	4.561
		6 F	1.439	.313	.824	2.054

Pairwise Comparisons

Delay Condition	U.S. Age Groups	(I) Item	(J) Item	Mean Difference (I-J)	S.E.	p	95% Confidence Interval for Difference[b] Lower Bound	95% Confidence Interval for Difference[b] Upper Bound

Immediate	College-Age (18-22)	1 T12	2 T5	3.911*	.178	.000	3.562	4.261
			3 T2	4.522*	.182	.000	4.165	4.878
			4 T1	5.814*	.183	.000	5.455	6.174
			5 R	6.930*	.184	.000	6.568	7.292
			6 F	7.970*	.193	.000	7.592	8.348
		2 T5	1 T12	-3.911*	.178	.000	-4.261	-3.562
			3 T2	.610*	.135	.000	.346	.875
			4 T1	1.903*	.135	.000	1.638	2.168
			5 R	3.019*	.129	.000	2.765	3.273
			6 F	4.059*	.141	.000	3.782	4.335
		3 T2	1 T12	-4.522*	.182	.000	-4.878	-4.165
			2 T5	-.610*	.135	.000	-.875	-.346
			4 T1	1.293*	.121	.000	1.056	1.530
			5 R	2.409*	.110	.000	2.193	2.624
			6 F	3.448*	.133	.000	3.187	3.709
		4 T1	1 T12	-5.814*	.183	.000	-6.174	-5.455
			2 T5	-1.903*	.135	.000	-2.168	-1.638
			3 T2	-1.293*	.121	.000	-1.530	-1.056
			5 R	1.116*	.104	.000	.911	1.320
			6 F	2.156*	.118	.000	1.924	2.387
		5 R	1 T12	-6.930*	.184	.000	-7.292	-6.568
			2 T5	-3.019*	.129	.000	-3.273	-2.765
			3 T2	-2.409*	.110	.000	-2.624	-2.193
			4 T1	-1.116*	.104	.000	-1.320	-.911
			6 F	1.040*	.103	.000	.837	1.242
		6 F	1 T12	-7.970*	.193	.000	-8.348	-7.592
			2 T5	-4.059*	.141	.000	-4.335	-3.782
			3 T2	-3.448*	.133	.000	-3.709	-3.187
			4 T1	-2.156*	.118	.000	-2.387	-1.924
			5 R	-1.040*	.103	.000	-1.242	-.837
	Older (59+)	1 T12	2 T5	3.186*	.531	.000	2.144	4.228
			3 T2	4.020*	.542	.000	2.956	5.084
			4 T1	5.310*	.547	.000	4.237	6.383
			5 R	5.043*	.550	.000	3.963	6.122
			6 F	6.084*	.574	.000	4.957	7.211

		2 T5	1 T12	-3.186*	.531	.000	-4.228	-2.144
			3 T2	.834*	.401	.038	.046	1.622
			4 T1	2.124*	.403	.000	1.334	2.915
			5 R	1.857*	.385	.000	1.101	2.613
			6 F	2.898*	.421	.000	2.072	3.723
		3 T2	1 T12	-4.020*	.542	.000	-5.084	-2.956
			2 T5	-.834*	.401	.038	-1.622	-.046
			4 T1	1.290*	.360	.000	.583	1.997
			5 R	1.023*	.327	.002	.381	1.664
			6 F	2.064*	.396	.000	1.286	2.841
		4 T1	1 T12	-5.310*	.547	.000	-6.383	-4.237
			2 T5	-2.124*	.403	.000	-2.915	-1.334
			3 T2	-1.290*	.360	.000	-1.997	-.583
			5 R	-.267	.311	.390	-.878	.343
			6 F	.774*	.352	.028	.082	1.465
		5 R	1 T12	-5.043*	.550	.000	-6.122	-3.963
			2 T5	-1.857*	.385	.000	-2.613	-1.101
			3 T2	-1.023*	.327	.002	-1.664	-.381
			4 T1	.267	.311	.390	-.343	.878
			6 F	1.041*	.308	.001	.437	1.645
		6 F	1 T12	-6.084*	.574	.000	-7.211	-4.957
			2 T5	-2.898*	.421	.000	-3.723	-2.072
			3 T2	-2.064*	.396	.000	-2.841	-1.286
			4 T1	-.774*	.352	.028	-1.465	-.082
			5 R	-1.041*	.308	.001	-1.645	-.437
Delay	College-Age (18-22)	1 T12	2 T5	.990*	.194	.000	.609	1.370
			3 T2	1.592*	.198	.000	1.203	1.981
			4 T1	3.164*	.200	.000	2.772	3.557
			5 R	3.415*	.201	.000	3.020	3.809
			6 F	5.464*	.210	.000	5.052	5.876
		2 T5	1 T12	-.990*	.194	.000	-1.370	-.609
			3 T2	.602*	.147	.000	.314	.890
			4 T1	2.175*	.147	.000	1.886	2.464
			5 R	2.425*	.141	.000	2.149	2.701
			6 F	4.474*	.154	.000	4.173	4.776

	3 T2	1 T12	-1.592*	.198	.000	-1.981	-1.203
		2 T5	-.602*	.147	.000	-.890	-.314
		4 T1	1.573*	.132	.000	1.314	1.831
		5 R	1.823*	.119	.000	1.588	2.057
		6 F	3.872*	.145	.000	3.588	4.156
	4 T1	1 T12	-3.164*	.200	.000	-3.557	-2.772
		2 T5	-2.175*	.147	.000	-2.464	-1.886
		3 T2	-1.573*	.132	.000	-1.831	-1.314
		5 R	.250*	.114	.028	.027	.473
		6 F	2.299*	.129	.000	2.047	2.552
	5 R	1 T12	-3.415*	.201	.000	-3.809	-3.020
		2 T5	-2.425*	.141	.000	-2.701	-2.149
		3 T2	-1.823*	.119	.000	-2.057	-1.588
		4 T1	-.250*	.114	.028	-.473	-.027
		6 F	2.049*	.112	.000	1.828	2.270
	6 F	1 T12	-5.464*	.210	.000	-5.876	-5.052
		2 T5	-4.474*	.154	.000	-4.776	-4.173
		3 T2	-3.872*	.145	.000	-4.156	-3.588
		4 T1	-2.299*	.129	.000	-2.552	-2.047
		5 R	-2.049*	.112	.000	-2.270	-1.828
Older (59+)	1 T12	2 T5	2.044*	.543	.000	.979	3.110
		3 T2	2.722*	.554	.000	1.635	3.810
		4 T1	4.633*	.559	.000	3.537	5.730
		5 R	3.306*	.562	.000	2.202	4.409
		6 F	5.761*	.587	.000	4.609	6.913
	2 T5	1 T12	-2.044*	.543	.000	-3.110	-.979
		3 T2	.678	.410	.099	-.128	1.483
		4 T1	2.589*	.412	.000	1.781	3.397
		5 R	1.261*	.394	.001	.488	2.034
		6 F	3.717*	.430	.000	2.873	4.560
	3 T2	1 T12	-2.722*	.554	.000	-3.810	-1.635
		2 T5	-.678	.410	.099	-1.483	.128
		4 T1	1.911*	.368	.000	1.189	2.633
		5 R	.583	.334	.081	-.073	1.239

	6 F	3.039*	.405	.000	2.244	3.834
4 T1	1 T12	-4.633*	.559	.000	-5.730	-3.537
	2 T5	-2.589*	.412	.000	-3.397	-1.781
	3 T2	-1.911*	.368	.000	-2.633	-1.189
	5 R	-1.328*	.318	.000	-1.951	-.704
	6 F	1.128*	.360	.002	.421	1.835
5 R	1 T12	-3.306*	.562	.000	-4.409	-2.202
	2 T5	-1.261*	.394	.001	-2.034	-.488
	3 T2	-.583	.334	.081	-1.239	.073
	4 T1	1.328*	.318	.000	.704	1.951
	6 F	2.456*	.314	.000	1.838	3.073
6 F	1 T12	-5.761*	.587	.000	-6.913	-4.609
	2 T5	-3.717*	.430	.000	-4.560	-2.873
	3 T2	-3.039*	.405	.000	-3.834	-2.244
	4 T1	-1.128*	.360	.002	-1.835	-.421
	5 R	-2.456*	.314	.000	-3.073	-1.838

Based on estimated marginal means

K. Experiment 2 - Item main effect

Estimates

Item	Mean	S.E.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
1 T12	7.775	.179	7.423	8.127
2 T5	5.242	.142	4.963	5.522
3 T2	4.561	.140	4.286	4.837
4 T1	3.044	.122	2.804	3.285
5 R	3.102	.126	2.855	3.349
6 F	1.455	.116	1.228	1.683

Pairwise Comparisons

(I) Item	(J) Item	Mean Difference (I-J)	S.E.	p	95% Confidence Interval for Difference Lower Bound	95% Confidence Interval for Difference Upper Bound
1 T12	2 T5	2.533*	.201	.000	2.138	2.927
	3 T2	3.214*	.205	.000	2.811	3.616
	4 T1	4.731*	.207	.000	4.325	5.137
	5 R	4.673*	.208	.000	4.265	5.082
	6 F	6.320*	.217	.000	5.893	6.746
2 T5	1 T12	-2.533*	.201	.000	-2.927	-2.138
	3 T2	.681*	.152	.000	.383	.979
	4 T1	2.198*	.152	.000	1.899	2.497
	5 R	2.141*	.146	.000	1.854	2.427
	6 F	3.787*	.159	.000	3.474	4.099
3 T2	1 T12	-3.214*	.205	.000	-3.616	-2.811
	2 T5	-.681*	.152	.000	-.979	-.383
	4 T1	1.517*	.136	.000	1.249	1.784
	5 R	1.459*	.124	.000	1.217	1.702
	6 F	3.106*	.150	.000	2.811	3.400
4 T1	1 T12	-4.731*	.207	.000	-5.137	-4.325

	2 T5	-2.198*	.152	.000	-2.497	-1.899
	3 T2	-1.517*	.136	.000	-1.784	-1.249
	5 R	-.057	.118	.627	-.288	.174
	6 F	1.589*	.133	.000	1.327	1.851
5 R	1 T12	-4.673*	.208	.000	-5.082	-4.265
	2 T5	-2.141*	.146	.000	-2.427	-1.854
	3 T2	-1.459*	.124	.000	-1.702	-1.217
	4 T1	.057	.118	.627	-.174	.288
	6 F	1.646*	.116	.000	1.418	1.875
6 F	1 T12	-6.320*	.217	.000	-6.746	-5.893
	2 T5	-3.787*	.159	.000	-4.099	-3.474
	3 T2	-3.106*	.150	.000	-3.400	-2.811
	4 T1	-1.589*	.133	.000	-1.851	-1.327
	5 R	-1.646*	.116	.000	-1.875	-1.418

Based on estimated marginal means

L. Experiment 2 - 2-way Delay x Item interaction

Estimates

				95% Confidence Interval	
Delay Condition	Item	Mean	S.E.	Lower Bound	Upper Bound
Immediate	1 T12	8.846	.284	8.287	9.405
	2 T5	4.667	.195	4.283	5.052
	3 T2	3.976	.196	3.591	4.361
	4 T1	2.340	.157	2.031	2.649
	5 R	1.861	.182	1.503	2.219
	6 F	.552	.128	.299	.805
Delay	1 T12	6.583	.358	5.878	7.288
	2 T5	5.266	.246	4.781	5.751
	3 T2	5.282	.247	4.796	5.768
	4 T1	2.696	.198	2.306	3.085
	5 R	3.044	.229	2.592	3.495
	6 F	.696	.162	.377	1.015

Pairwise Comparisons

						95% Confidence Interval for Difference[b]	
Delay Condition	(I) Item	(J) Item	Mean Difference (I-J)	S.E.	p	Lower Bound	Upper Bound
Immediate	1 T12	2 T5	4.179*	.307	.000	3.575	4.783
		3 T2	4.870*	.311	.000	4.259	5.482
		4 T1	6.506*	.298	.000	5.920	7.093
		5 R	6.985*	.298	.000	6.398	7.573
		6 F	8.294*	.300	.000	7.704	8.884
	2 T5	1 T12	-4.179*	.307	.000	-4.783	-3.575
		3 T2	.691*	.186	.000	.325	1.057
		4 T1	2.327*	.195	.000	1.944	2.711
		5 R	2.806*	.213	.000	2.387	3.225
		6 F	4.115*	.223	.000	3.676	4.554
	3 T2	1 T12	-4.870*	.311	.000	-5.482	-4.259
		2 T5	-.691*	.186	.000	-1.057	-.325
		4 T1	1.636*	.178	.000	1.286	1.986

		5 R	2.115*	.181	.000	1.759	2.471
		6 F	3.424*	.221	.000	2.989	3.858
	4 T1	1 T12	-6.506*	.298	.000	-7.093	-5.920
		2 T5	-2.327*	.195	.000	-2.711	-1.944
		3 T2	-1.636*	.178	.000	-1.986	-1.286
		5 R	.479*	.150	.002	.183	.775
		6 F	1.788*	.168	.000	1.456	2.120
	5 R	1 T12	-6.985*	.298	.000	-7.573	-6.398
		2 T5	-2.806*	.213	.000	-3.225	-2.387
		3 T2	-2.115*	.181	.000	-2.471	-1.759
		4 T1	-.479*	.150	.002	-.775	-.183
		6 F	1.309*	.178	.000	.959	1.658
	6 F	1 T12	-8.294*	.300	.000	-8.884	-7.704
		2 T5	-4.115*	.223	.000	-4.554	-3.676
		3 T2	-3.424*	.221	.000	-3.858	-2.989
		4 T1	-1.788*	.168	.000	-2.120	-1.456
		5 R	-1.309*	.178	.000	-1.658	-.959
Delay	1 T12	2 T5	1.317*	.387	.001	.556	2.079
		3 T2	1.302*	.392	.001	.530	2.073
		4 T1	3.888*	.376	.000	3.148	4.628
		5 R	3.540*	.376	.000	2.798	4.281
		6 F	5.887*	.378	.000	5.143	6.631
	2 T5	1 T12	-1.317*	.387	.001	-2.079	-.556
		3 T2	-.016	.234	.946	-.477	.446
		4 T1	2.571*	.246	.000	2.087	3.054
		5 R	2.222*	.268	.000	1.694	2.751
		6 F	4.570*	.281	.000	4.017	5.123
	3 T2	1 T12	-1.302*	.392	.001	-2.073	-.530
		2 T5	.016	.234	.946	-.446	.477
		4 T1	2.586*	.224	.000	2.145	3.027
		5 R	2.238*	.228	.000	1.789	2.687
		6 F	4.586*	.278	.000	4.038	5.134
	4 T1	1 T12	-3.888*	.376	.000	-4.628	-3.148
		2 T5	-2.571*	.246	.000	-3.054	-2.087

	3 T2	-2.586*	.224	.000	-3.027	-2.145
	5 R	-.348	.190	.068	-.722	.025
	6 F	1.999*	.212	.000	1.581	2.418
5 R	1 T12	-3.540*	.376	.000	-4.281	-2.798
	2 T5	-2.222*	.268	.000	-2.751	-1.694
	3 T2	-2.238*	.228	.000	-2.687	-1.789
	4 T1	.348	.190	.068	-.025	.722
	6 F	2.348*	.224	.000	1.907	2.789
6 F	1 T12	-5.887*	.378	.000	-6.631	-5.143
	2 T5	-4.570*	.281	.000	-5.123	-4.017
	3 T2	-4.586*	.278	.000	-5.134	-4.038
	4 T1	-1.999*	.212	.000	-2.418	-1.581
	5 R	-2.348*	.224	.000	-2.789	-1.907

Based on estimated marginal means

M. Experiment 2 - 3-way Age Group x Delay x Item interaction

Estimates

Delay Condition	Brazilian Age Groups	Item	Mean	S.E.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Immediate	College-Aged (18-22)	1 T12	9.579	.379	8.833	10.326
		2 T5	4.713	.261	4.200	5.227
		3 T2	3.988	.261	3.473	4.502
		4 T1	2.476	.210	2.063	2.888
		5 R	2.177	.243	1.699	2.655
		6 F	.610	.172	.272	.948
	Post-College (23+)	1 T12	8.114	.422	7.281	8.946
		2 T5	4.621	.291	4.048	5.194
		3 T2	3.964	.291	3.391	4.538
		4 T1	2.205	.234	1.744	2.665
		5 R	1.545	.271	1.012	2.078
		6 F	.495	.191	.118	.871
Delay	College-Aged (18-22)	1 T12	6.371	.580	5.229	7.514
		2 T5	5.300	.399	4.514	6.086
		3 T2	5.514	.400	4.727	6.302
		4 T1	2.600	.321	1.968	3.232
		5 R	2.964	.372	2.232	3.696
		6 F	.597	.263	.080	1.115
	Post-College (23+)	1 T12	6.795	.419	5.969	7.621
		2 T5	5.232	.289	4.664	5.801
		3 T2	5.049	.289	4.480	5.619
		4 T1	2.791	.232	2.334	3.248
		5 R	3.123	.269	2.594	3.652
		6 F	.795	.190	.421	1.169

Pairwise Comparisons

Delay Condition	Brazilian Age Groups	(I) Item	(J) Item	Mean Difference (I-J)	S.E.	p	95% Confidence Interval for Difference[b] Lower Bound	95% Confidence Interval for Difference[b] Upper Bound
Immediate		1 T12	2 T5	4.866*	.409	.000	4.060	5.672

College-Aged (18-22)		3 T2	5.591*	.415	.000	4.774	6.409
		4 T1	7.104*	.398	.000	6.320	7.887
		5 R	7.402*	.399	.000	6.617	8.187
		6 F	8.970*	.400	.000	8.181	9.758
	2 T5	1 T12	-4.866*	.409	.000	-5.672	-4.060
		3 T2	.726*	.248	.004	.237	1.214
		4 T1	2.238*	.260	.000	1.726	2.750
		5 R	2.537*	.284	.000	1.977	3.096
		6 F	4.104*	.298	.000	3.518	4.690
	3 T2	1 T12	-5.591*	.415	.000	-6.409	-4.774
		2 T5	-.726*	.248	.004	-1.214	-.237
		4 T1	1.512*	.237	.000	1.045	1.979
		5 R	1.811*	.242	.000	1.335	2.287
		6 F	3.378*	.295	.000	2.798	3.959
	4 T1	1 T12	-7.104*	.398	.000	-7.887	-6.320
		2 T5	-2.238*	.260	.000	-2.750	-1.726
		3 T2	-1.512*	.237	.000	-1.979	-1.045
		5 R	.299	.201	.138	-.097	.694
		6 F	1.866*	.225	.000	1.423	2.309
	5 R	1 T12	-7.402*	.399	.000	-8.187	-6.617
		2 T5	-2.537*	.284	.000	-3.096	-1.977
		3 T2	-1.811*	.242	.000	-2.287	-1.335
		4 T1	-.299	.201	.138	-.694	.097
		6 F	1.567*	.237	.000	1.100	2.034
	6 F	1 T12	-8.970*	.400	.000	-9.758	-8.181
		2 T5	-4.104*	.298	.000	-4.690	-3.518
		3 T2	-3.378*	.295	.000	-3.959	-2.798
		4 T1	-1.866*	.225	.000	-2.309	-1.423
		5 R	-1.567*	.237	.000	-2.034	-1.100
Post-College (23+)	1 T12	2 T5	3.492*	.456	.000	2.594	4.391
		3 T2	4.149*	.462	.000	3.239	5.060
		4 T1	5.909*	.444	.000	5.035	6.783
		5 R	6.568*	.444	.000	5.693	7.443
		6 F	7.619*	.446	.000	6.740	8.497
	2 T5	1 T12	-3.492*	.456	.000	-4.391	-2.594

			3 T2	.657*	.276	.018	.112	1.202
			4 T1	2.417*	.290	.000	1.846	2.988
			5 R	3.076*	.317	.000	2.452	3.700
			6 F	4.126*	.332	.000	3.473	4.780
		3 T2	1 T12	-4.149*	.462	.000	-5.060	-3.239
			2 T5	-.657*	.276	.018	-1.202	-.112
			4 T1	1.760*	.264	.000	1.239	2.280
			5 R	2.419*	.269	.000	1.889	2.949
			6 F	3.469*	.328	.000	2.822	4.116
		4 T1	1 T12	-5.909*	.444	.000	-6.783	-5.035
			2 T5	-2.417*	.290	.000	-2.988	-1.846
			3 T2	-1.760*	.264	.000	-2.280	-1.239
			5 R	.659*	.224	.004	.218	1.100
			6 F	1.710*	.251	.000	1.216	2.204
		5 R	1 T12	-6.568*	.444	.000	-7.443	-5.693
			2 T5	-3.076*	.317	.000	-3.700	-2.452
			3 T2	-2.419*	.269	.000	-2.949	-1.889
			4 T1	-.659*	.224	.004	-1.100	-.218
			6 F	1.051*	.264	.000	.530	1.571
		6 F	1 T12	-7.619*	.446	.000	-8.497	-6.740
			2 T5	-4.126*	.332	.000	-4.780	-3.473
			3 T2	-3.469*	.328	.000	-4.116	-2.822
			4 T1	-1.710*	.251	.000	-2.204	-1.216
			5 R	-1.051*	.264	.000	-1.571	-.530
Delay	College-Aged (18-22)	1 T12	2 T5	1.071	.627	.089	-.163	2.306
			3 T2	.857	.635	.178	-.394	2.108
			4 T1	3.771*	.609	.000	2.572	4.971
			5 R	3.407*	.610	.000	2.206	4.609
			6 F	5.774*	.612	.000	4.568	6.980
		2 T5	1 T12	-1.071	.627	.089	-2.306	.163
			3 T2	-.214	.380	.573	-.962	.534
			4 T1	2.700*	.398	.000	1.916	3.484
			5 R	2.336*	.435	.000	1.479	3.193
			6 F	4.703*	.455	.000	3.806	5.600
		3 T2	1 T12	-.857	.635	.178	-2.108	.394

		2 T5	.214	.380	.573	-.534	.962
		4 T1	2.914*	.363	.000	2.199	3.629
		5 R	2.550*	.370	.000	1.822	3.278
		6 F	4.917*	.451	.000	4.028	5.805
	4 T1	1 T12	-3.771*	.609	.000	-4.971	-2.572
		2 T5	-2.700*	.398	.000	-3.484	-1.916
		3 T2	-2.914*	.363	.000	-3.629	-2.199
		5 R	-.364	.307	.237	-.970	.241
		6 F	2.003*	.344	.000	1.324	2.681
	5 R	1 T12	-3.407*	.610	.000	-4.609	-2.206
		2 T5	-2.336*	.435	.000	-3.193	-1.479
		3 T2	-2.550*	.370	.000	-3.278	-1.822
		4 T1	.364	.307	.237	-.241	.970
		6 F	2.367*	.363	.000	1.652	3.082
	6 F	1 T12	-5.774*	.612	.000	-6.980	-4.568
		2 T5	-4.703*	.455	.000	-5.600	-3.806
		3 T2	-4.917*	.451	.000	-5.805	-4.028
		4 T1	-2.003*	.344	.000	-2.681	-1.324
		5 R	-2.367*	.363	.000	-3.082	-1.652
Post-College (23+)	1 T12	2 T5	1.563*	.453	.001	.671	2.455
		3 T2	1.746*	.459	.000	.842	2.650
		4 T1	4.004*	.440	.000	3.137	4.871
		5 R	3.672*	.441	.000	2.804	4.541
		6 F	6.001*	.443	.000	5.129	6.872
	2 T5	1 T12	-1.563*	.453	.001	-2.455	-.671
		3 T2	.183	.274	.506	-.358	.723
		4 T1	2.441*	.288	.000	1.875	3.008
		5 R	2.109*	.314	.000	1.490	2.728
		6 F	4.437*	.329	.000	3.789	5.086
	3 T2	1 T12	-1.746*	.459	.000	-2.650	-.842
		2 T5	-.183	.274	.506	-.723	.358
		4 T1	2.258*	.262	.000	1.742	2.775
		5 R	1.926*	.267	.000	1.400	2.453
		6 F	4.255*	.326	.000	3.612	4.897

4 T1	1 T12	-4.004*	.440	.000	-4.871	-3.137
	2 T5	-2.441*	.288	.000	-3.008	-1.875
	3 T2	-2.258*	.262	.000	-2.775	-1.742
	5 R	-.332	.222	.136	-.770	.106
	6 F	1.996*	.249	.000	1.506	2.487
5 R	1 T12	-3.672*	.441	.000	-4.541	-2.804
	2 T5	-2.109*	.314	.000	-2.728	-1.490
	3 T2	-1.926*	.267	.000	-2.453	-1.400
	4 T1	.332	.222	.136	-.106	.770
	6 F	2.328*	.262	.000	1.812	2.845
6 F	1 T12	-6.001*	.443	.000	-6.872	-5.129
	2 T5	-4.437*	.329	.000	-5.086	-3.789
	3 T2	-4.255*	.326	.000	-4.897	-3.612
	4 T1	-1.996*	.249	.000	-2.487	-1.506
	5 R	-2.328*	.262	.000	-2.845	-1.812

Based on estimated marginal means

N. Experiment 3 - Item main effect

Estimates

Item	Mean	S.E.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
1 T12	7.995	.170	7.661	8.328
2 T5	5.285	.138	5.015	5.555
3 T2	4.854	.131	4.598	5.110
4 T1	3.031	.118	2.800	3.262
5 R	2.706	.117	2.476	2.936
6 F	.950	.106	.742	1.158

Pairwise Comparisons

(I) Item	(J) Item	Mean Difference (I-J)	S.E.	p	95% Confidence Interval for Difference Lower Bound	95% Confidence Interval for Difference Upper Bound
1 T12	2 T5	2.710*	.194	.000	2.329	3.090
	3 T2	3.141*	.197	.000	2.755	3.526
	4 T1	4.963*	.197	.000	4.578	5.349
	5 R	5.289*	.196	.000	4.904	5.673
	6 F	7.044*	.198	.000	6.655	7.434
2 T5	1 T12	-2.710*	.194	.000	-3.090	-2.329
	3 T2	.431*	.144	.003	.148	.714
	4 T1	2.254*	.147	.000	1.965	2.543
	5 R	2.579*	.142	.000	2.300	2.858
	6 F	4.335*	.146	.000	4.047	4.622
3 T2	1 T12	-3.141*	.197	.000	-3.526	-2.755
	2 T5	-.431*	.144	.003	-.714	-.148
	4 T1	1.823*	.131	.000	1.567	2.079
	5 R	2.148*	.120	.000	1.913	2.383
	6 F	3.904*	.138	.000	3.632	4.176
4 T1	1 T12	-4.963*	.197	.000	-5.349	-4.578

	2 T5	-2.254*	.147	.000	-2.543	-1.965
	3 T2	-1.823*	.131	.000	-2.079	-1.567
	5 R	.325*	.111	.003	.108	.543
	6 F	2.081*	.125	.000	1.835	2.327
5 R	1 T12	-5.289*	.196	.000	-5.673	-4.904
	2 T5	-2.579*	.142	.000	-2.858	-2.300
	3 T2	-2.148*	.120	.000	-2.383	-1.913
	4 T1	-.325*	.111	.003	-.543	-.108
	6 F	1.756*	.103	.000	1.554	1.958
6 F	1 T12	-7.044*	.198	.000	-7.434	-6.655
	2 T5	-4.335*	.146	.000	-4.622	-4.047
	3 T2	-3.904*	.138	.000	-4.176	-3.632
	4 T1	-2.081*	.125	.000	-2.327	-1.835
	5 R	-1.756*	.103	.000	-1.958	-1.554

Based on estimated marginal means

O. Experiment 3 - Country main effect

Estimates

			95% Confidence Interval	
Country	Mean	S.E.	Lower Bound	Upper Bound
US	4.366	.057	4.254	4.478
Brazil	3.908	.159	3.596	4.219

P. Experiment 3 - 2-way Country x Item interaction

Estimates

Country	Item	Mean	S.E.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
US	1 T12	8.014	.115	7.789	8.238
	2 T5	5.563	.093	5.381	5.745
	3 T2	4.957	.088	4.784	5.130
	4 T1	3.524	.079	3.369	3.680
	5 R	2.841	.079	2.686	2.997
	6 F	1.297	.071	1.157	1.437
Brazil	1 T12	7.975	.320	7.348	8.603
	2 T5	5.007	.259	4.498	5.515
	3 T2	4.751	.246	4.269	5.233
	4 T1	2.538	.222	2.103	2.973
	5 R	2.571	.221	2.137	3.004
	6 F	.604	.199	.212	.995

Pairwise Comparisons

Item	Mean Difference (US-Brazil)	S.E.	p	95% Confidence Interval for Difference[b] Lower Bound	95% Confidence Interval for Difference[b] Upper Bound
1 T12	.038	.340	.910	-.628	.705
2 T5	.557*	.275	.043	.016	1.097
3 T2	.206	.261	.431	-.307	.718
4 T1	.986*	.235	.000	.525	1.448
5 R	.271	.235	.249	-.190	.731
6 F	.693*	.212	.001	.278	1.109

Based on estimated marginal means

Pairwise Comparisons

Country	Item (I)	Item (J)	Mean Difference (I-J)	S.E.	p	95% Confidence Interval for Difference Lower Bound	95% Confidence Interval for Difference Upper Bound
US	1 T12	2 T5	2.450*	.131	.000	2.194	2.707
		3 T2	3.057*	.133	.000	2.796	3.317
		4 T1	4.489*	.133	.000	4.229	4.750
		5 R	5.172*	.132	.000	4.913	5.432
		6 F	6.717*	.134	.000	6.454	6.980
	2 T5	1 T12	-2.450*	.131	.000	-2.707	-2.194
		3 T2	.606*	.097	.000	.415	.797
		4 T1	2.039*	.099	.000	1.844	2.234
		5 R	2.722*	.096	.000	2.534	2.910
		6 F	4.266*	.099	.000	4.073	4.460
	3 T2	1 T12	-3.057*	.133	.000	-3.317	-2.796
		2 T5	-.606*	.097	.000	-.797	-.415
		4 T1	1.433*	.088	.000	1.260	1.606
		5 R	2.116*	.081	.000	1.957	2.274
		6 F	3.660*	.093	.000	3.477	3.843
	4 T1	1 T12	-4.489*	.133	.000	-4.750	-4.229
		2 T5	-2.039*	.099	.000	-2.234	-1.844
		3 T2	-1.433*	.088	.000	-1.606	-1.260
		5 R	.683*	.075	.000	.536	.830
		6 F	2.227*	.085	.000	2.061	2.393
	5 R	1 T12	-5.172*	.132	.000	-5.432	-4.913
		2 T5	-2.722*	.096	.000	-2.910	-2.534
		3 T2	-2.116*	.081	.000	-2.274	-1.957
		4 T1	-.683*	.075	.000	-.830	-.536
		6 F	1.544*	.069	.000	1.408	1.681
	6 F	1 T12	-6.717*	.134	.000	-6.980	-6.454

		2 T5	-4.266*	.099	.000	-4.460	-4.073
		3 T2	-3.660*	.093	.000	-3.843	-3.477
		4 T1	-2.227*	.085	.000	-2.393	-2.061
		5 R	-1.544*	.069	.000	-1.681	-1.408
Brazil	1 T12	2 T5	2.969*	.365	.000	2.252	3.685
		3 T2	3.224*	.370	.000	2.498	3.951
		4 T1	5.438*	.370	.000	4.711	6.164
		5 R	5.405*	.369	.000	4.681	6.129
		6 F	7.372*	.374	.000	6.638	8.105
	2 T5	1 T12	-2.969*	.365	.000	-3.685	-2.252
		3 T2	.256	.272	.347	-.277	.789
		4 T1	2.469*	.277	.000	1.925	3.013
		5 R	2.436*	.267	.000	1.911	2.961
		6 F	4.403*	.276	.000	3.862	4.944
	3 T2	1 T12	-3.224*	.370	.000	-3.951	-2.498
		2 T5	-.256	.272	.347	-.789	.277
		4 T1	2.213*	.246	.000	1.731	2.696
		5 R	2.180*	.225	.000	1.738	2.623
		6 F	4.147*	.261	.000	3.636	4.659
	4 T1	1 T12	-5.438*	.370	.000	-6.164	-4.711
		2 T5	-2.469*	.277	.000	-3.013	-1.925
		3 T2	-2.213*	.246	.000	-2.696	-1.731
		5 R	-.033	.209	.875	-.442	.377
		6 F	1.934*	.236	.000	1.471	2.397
	5 R	1 T12	-5.405*	.369	.000	-6.129	-4.681
		2 T5	-2.436*	.267	.000	-2.961	-1.911
		3 T2	-2.180*	.225	.000	-2.623	-1.738
		4 T1	.033	.209	.875	-.377	.442
		6 F	1.967*	.194	.000	1.587	2.347

6 F	1 T12	-7.372*	.374	.000	-8.105	-6.638
	2 T5	-4.403*	.276	.000	-4.944	-3.862
	3 T2	-4.147*	.261	.000	-4.659	-3.636
	4 T1	-1.934*	.236	.000	-2.397	-1.471
	5 R	-1.967*	.194	.000	-2.347	-1.587

Based on estimated marginal means

Q. Experiment 3 - 2-way Delay x Item interaction

Estimates

Delay Condition		Mean	S.E.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Immediate	1 T12	9.322	.191	8.946	9.697
	2 T5	4.933	.155	4.629	5.237
	3 T2	4.265	.147	3.976	4.554
	4 T1	2.862	.133	2.602	3.123
	5 R	2.155	.132	1.896	2.415
	5 F	.852	.119	.618	1.086
Delay	1 T12	6.668	.281	6.117	7.218
	2 T5	5.637	.227	5.191	6.083
	3 T2	5.443	.216	5.020	5.866
	4 T1	3.200	.194	2.818	3.581
	5 R	3.257	.194	2.876	3.637
	5 F	1.049	.175	.705	1.392

Pairwise Comparisons

Delay Condition	Item (I)	Item (J)	Mean Difference (I-J)	S.E.	p	95% Confidence Interval for Difference[b] Lower Bound	95% Confidence Interval for Difference[b] Upper Bound
Immediate	1 T12	2 T5	4.389*	.218	.000	3.960	4.817
		3 T2	5.057*	.221	.000	4.622	5.491
		4 T1	6.459*	.221	.000	6.025	6.893
		5 R	7.166*	.221	.000	6.733	7.599
		6 F	8.470*	.224	.000	8.031	8.908
	2 T5	1 T12	-4.389*	.218	.000	-4.817	-3.960
		3 T2	.668*	.162	.000	.349	.987
		4 T1	2.070*	.166	.000	1.745	2.396
		5 R	2.778*	.160	.000	2.464	3.092
		6 F	4.081*	.165	.000	3.757	4.405

	3 T2	1 T12	-5.057*	.221	.000	-5.491	-4.622
		2 T5	-.668*	.162	.000	-.987	-.349
		4 T1	1.402*	.147	.000	1.114	1.691
		5 R	2.110*	.135	.000	1.845	2.374
		6 F	3.413*	.156	.000	3.107	3.719
	4 T1	1 T12	-6.459*	.221	.000	-6.893	-6.025
		2 T5	-2.070*	.166	.000	-2.396	-1.745
		3 T2	-1.402*	.147	.000	-1.691	-1.114
		5 R	.707*	.125	.000	.462	.952
		6 F	2.011*	.141	.000	1.734	2.288
	5 R	1 T12	-7.166*	.221	.000	-7.599	-6.733
		2 T5	-2.778*	.160	.000	-3.092	-2.464
		3 T2	-2.110*	.135	.000	-2.374	-1.845
		4 T1	-.707*	.125	.000	-.952	-.462
		6 F	1.303*	.116	.000	1.076	1.531
	6 F	1 T12	-8.470*	.224	.000	-8.908	-8.031
		2 T5	-4.081*	.165	.000	-4.405	-3.757
		3 T2	-3.413*	.156	.000	-3.719	-3.107
		4 T1	-2.011*	.141	.000	-2.288	-1.734
		5 R	-1.303*	.116	.000	-1.531	-1.076
Delay	1 T12	2 T5	1.030*	.320	.001	.402	1.659
		3 T2	1.225*	.325	.000	.587	1.862
		4 T1	3.468*	.325	.000	2.830	4.105
		5 R	3.411*	.324	.000	2.775	4.046
		6 F	5.619*	.328	.000	4.975	6.263
	2 T5	1 T12	-1.030*	.320	.001	-1.659	-.402
		3 T2	.194	.238	.416	-.274	.662
		4 T1	2.437*	.243	.000	1.960	2.915
		5 R	2.380*	.235	.000	1.920	2.841
		6 F	4.588*	.242	.000	4.113	5.064

3 T2	1 T12	-1.225*	.325	.000	-1.862	-.587
	2 T5	-.194	.238	.416	-.662	.274
	4 T1	2.243*	.216	.000	1.820	2.667
	5 R	2.186*	.198	.000	1.798	2.575
	6 F	4.394*	.229	.000	3.945	4.844
4 T1	1 T12	-3.468*	.325	.000	-4.105	-2.830
	2 T5	-2.437*	.243	.000	-2.915	-1.960
	3 T2	-2.243*	.216	.000	-2.667	-1.820
	5 R	-.057	.183	.756	-.416	.302
	6 F	2.151*	.207	.000	1.744	2.558
5 R	1 T12	-3.411*	.324	.000	-4.046	-2.775
	2 T5	-2.380*	.235	.000	-2.841	-1.920
	3 T2	-2.186*	.198	.000	-2.575	-1.798
	4 T1	.057	.183	.756	-.302	.416
	6 F	2.208*	.170	.000	1.874	2.542
6 F	1 T12	-5.619*	.328	.000	-6.263	-4.975
	2 T5	-4.588*	.242	.000	-5.064	-4.113
	3 T2	-4.394*	.229	.000	-4.844	-3.945
	4 T1	-2.151*	.207	.000	-2.558	-1.744
	5 R	-2.208*	.170	.000	-2.542	-1.874

Based on estimated marginal means

R. Supplemental methods and results for analyses with fully-crossed design

In a separate analysis of our data, the targets and distractors that were tested were broken down into three factors with two levels each for better comparison (Table A1). Each target and distractor that was tested fit into a 2x2x2 paradigm based on certain factors. The first factor, target/distractor, was based on whether the item was a target or a distractor; the second, "high"/"low", whether the item was the more frequent of two most presented targets or not, or, in the case of distractors, whether the distractor was related or not. The last factor, "less"/"more", was determined by which of the two in remaining pairs were presented more. In the case of the distractors, each pair of distractors were just replications of the same theoretical item. Thus, each distractor was assigned a level of "less"/"more" in order to fit the design for analyses, despite it having no significant meaning.

Experiment 1

Methods

The analyses for our experiments were similar to our original analyses. The analysis for the first experiment was a 2 (age group: younger, older) x 2 (delay: tested immediately, tested after a delay) x 2 (character gist: healthy eater gist, unhealthy eater gist) x 2 ("target"/"distractor": target, distractor) x 2 ("high"/"low": high, low) x 2 ("less"/"more": less, more). As in the original analysis of the first experiment, only the American sample was used, and the age groups consisted of a younger (18-22) group and an older (59-100) group.

Results

We observed a main effect of target/distractor, $F(1, 858) = 785.016$, $MSE = 10871.451$, $p < .001$, $\eta_p^2 = .478$. Frequency estimates for targets ($M = 5.156$; $SE = .099$) were significantly higher than those for distractors ($M = 2.279$; $SE = .106$). We also observed a main effect of "high"/"low", $F(1, 858) = 630.888$, $MSE = 6218.967$, $p < .001$, $\eta_p^2 = .424$, and "more"/"less", $F(1, 858) = 283.632$, $MSE = 2005.284$, $p < .001$, $\eta_p^2 = .248$. Items that were shown more times to the subject during the stimulus presentation were routinely estimated to be higher than items that were shown fewer times. This pattern was stable within significant target/distractor X "high"/"low", $F(1, 858) = 33.840$, $MSE = 368.581$, $p < .001$, $\eta_p^2 = .038$; target/distractor X "more"/"less", $F(1, 858) = 120.614$, $MSE = 817.639$, $p < .001$, $\eta_p^2 = .123$, and "high"/"low" X "more"/"less" interactions, $F(1, 858) = 43.745$, $MSE = 291.510$, $p < .001$, $\eta_p^2 = .049$.

A main effect of delay was approaching significance, $F(1, 858) = 3.857$, $MSE = 160.678$, $p = .05$, $\eta_p^2 = .004$. Subjects with a delay gave significantly higher estimates than subjects without a delay ($M = 3.892$, $SE = .128$; $M = 3.542$, $SE = .124$). There was a significant target/distractor X delay interaction, $F(1, 858) = 7.653$, $MSE = 105.985$, $p = .006$, $\eta_p^2 = .009$. Estimates for targets after a delay were not significantly different, but subjects gave higher estimates for distractors after a delay. There was also a significant target/distractor X age group interaction, $F(1, 858) = 30.637$, $MSE = 424.281$, $p < .001$, $\eta_p^2 = .034$. Older subjects gave significantly higher estimates for distractors ($M_{diff} = -.419$, $SE = .212$, $p < .05$) and significantly lower estimates for targets ($M_{diff} = .718$, $SE = .199$, $p < .001$).

These interactions were further explored in significant 3- and 4-way interactions. A 3-way target/distractor X "high"/"low" X delay interaction was present, $F(1, 858) =$

33.840, MSE = 368.586, $p < .001$, $\eta_p^2 = .038$, as well as a 3-way target/distractor X "more"/"less" X delay interaction, $F(1, 858) = 17.608$, MSE = 119.367, $p < .001$, $\eta_p^2 = .020$, a significant 3-way "high"/"low" X "more"/"less" X delay interaction, $F(1, 858) = 5.321$, MSE = 35.458, $p < .05$, $\eta_p^2 = .006$, and a significant 3-way "more"/"less" X delay X age group 3-way interaction, $F(1, 858) = 7.323$, MSE = 51.770, $p < .01$, $\eta_p^2 = .008$. These interactions were qualified by several 4-way interactions. A significant 4-way "high"/"low" X "more"/"less" X delay X age group interaction was present, $F(1, 858) = 5.446$, MSE = 36.289, $p < .05$, $\eta_p^2 = .006$, as well as a significant 4-way target/distractor X "high"/"low" X "more"/"less" X delay interaction, $F(1, 858) = 41.696$, MSE = 273.303, $p < .001$, $\eta_p^2 = .046$.

By examining our 4-way target/distractor X "high"/"low" X "more"/"less" X delay interaction, we can see the effects of delay on each of our groups and the individual items. For subjects who had a delay compared to those who were test immediately, we see significantly lower estimates for the target presented 12 times (the target in the high and more categories), $M_{diff} = 1.386$, SE = .359, $p < .001$. We also see significantly higher estimates for the targets presented 5 times (the target in the high and less categories), $M_{diff} = -.645$, SE = .285, $p < .05$, and 2 times (the target in the low and more categories), $M_{diff} = -.727$, SE = .281, $p < .05$. We found no significant effect of delay on the target presented 1 time (the target in the low and less categories), $M_{diff} = -.277$, SE = .245, $p = .258$. For our distractors, we see significant effects of delay only on the related distractors (the distractors in the high category). Both RA (the replication in the more category) and RB (the replication in the less category) had significantly higher estimates after a delay, $M_{diff} = -1.739$, SE = .283, $p < .001$, and $M_{diff} = -.740$, SE = .273, $p < .01$, respectively. The opposite is true for the false distractors, where both estimates for FA (the replication in the more category) and FB (the replication in the less category) were not significantly different after a delay, $M_{diff} = .056$, $SE = .262$, $p = .829$, and $M_{diff} = -.112$, $SE = .241$, $p = .642$, respectively. For the distractor category, it is important to remember that there was no theoretical difference between the "more" and "less" categories, which agrees with our results.

Experiment 2

Methods

In the second experiment, we ran a 2 (age group: younger, older) x 2 (delay: tested immediately, tested after a delay) x 2 (character gist: healthy eater gist, unhealthy eater gist) x 2 (“target”/“distractor”: target, distractor) x 2 (“high”/“low”: high, low) x 2 (“less”/“more”: less, more) repeated measures ANOVA with age group and delay as between-subjects variables and the character gist, “target”/“distractor,” “high”/“low,” and “less”/“more” as within-subjects variables. The age groups were a college-aged (18-22) group and a post-college (23-54) group.

Results

We observed a main effect of target/distractor, $F(1, 246) = 953.021$, $MSE = 10559.024$, $p < .001$, $\eta_p^2 = .795$. Frequencies estimated for targets ($M = 4.957$, $SE = .118$) were significantly higher than those for distractors ($M = 1.538$, $SE = .105$). We also observed a main effect of “high”/”low”, $F(1, 246) = 580.231$, $MSE = 4770.031$, $p < .001$, $\eta_p^2 = .702$, and “more”/”less”, $F(1, 246) = 219.349$, $MSE = 1611.613$, $p < .001$, $\eta_p^2 = .471$. As before, items that were shown to subjects more than others (or fit the gist of an event more than others) were estimated to have occurred at a higher frequency than those that were shown less (or did not fit the gist). There was a significant target/distractor X “high”/”low” interaction, $F(1, 246) = 18.683$, $MSE = 199.215$, $p < .001$, $\eta_p^2 = .071$. Subjects gave higher estimates for “high” items from both targets and distractors. There was a significant target/distractor X “more”/”less” interaction, $F(1, 246) = 246.208$, $MSE = 1081.281$, $p < .001$, $\eta_p^2 = .500$. Subjects gave higher estimates for “more” items for targets but not distractors. This is most likely due to the fact that, for distractors, there was no theoretical difference between the “less” items and the “more” items. There was also a significant “high”/”low” X “more”/”less” interaction, $F(1, 246) = 11.452$, $MSE = 97.952$, $p < .01$, $\eta_p^2 = .044$. “More” items had higher estimates than “less” items, and “high” items had higher estimates than “low” items. There was not a significant target/distractor X “high”/”low” X “more”/”less” interaction, $F(1, 246) = .018$, $MSE = .104$, $p = .893$, $\eta_p^2 = .000$.

There was a significant target/distractor X delay interaction, $F(1, 246) = 8.986$, $MSE = 99.558$, $p = .003$, $\eta_p^2 = .035$. Estimates for targets after a delay were not significantly different, but subjects gave higher estimates for distractors after a delay. There was a significant “more”/”less” X delay interaction, $F(1, 246) = 8.730$, $MSE = 64.139$, $p < .01$, $\eta_p^2 = .034$. Greater estimates for “less” items were given after a delay, but the difference was not significant for “more” items.

These interactions were further explored in significant 3- and 4-way interactions. A 3-way target/distractor X “high”/”low” X delay interaction was present, $F(1, 246) = 38.648$, $MSE = 412.093$, $p < .001$, $\eta_p^2 = .136$, as well as a 3-way target/distractor X “more”/”less” X delay interaction, $F(1, 246) = 9.194$, $MSE = 40.380$, $p < .01$, $\eta_p^2 = .036$, and a 3-way “high”/”low” X “more”/”less” X delay interaction, $F(1, 246) = 32.069$, MSE

= 274.297, $p < .001$, $\eta_p^2 = .115$. These interactions were qualified by significant 4-way "high"/"low" X "more"/"less" X delay X age group, $F(1, 246) = 6.172$, $MSE = 52.792$, $p < .05$, $\eta_p^2 = .024$, and target/distractor X "high"/"low" X "more"/"less" X delay interactions, $F(1, 246) = 25.580$, $MSE = 146.018$, $p < .001$, $\eta_p^2 = .094$.

Within this latter interaction, we can see the effects of delay on our entire set of items. We see significantly lower estimates in the delay condition for the target presented 12 times (the target in the high and more categories), $M_{diff} = 2.263$, $SE = .457$, $p < .001$. We see the opposite for the target presented 2 times (the target in the high and less categories), $M_{diff} = -1.306$, $SE = .315$, $p < .001$. We found no significant effect of delay on the targets presented 5 times (the target in the high and less categories), $M_{diff} = -.599$, $SE = .314$, $p = .058$, or 1 time (the target in the low and less categories), $M_{diff} = -.355$, $SE = .253$, $p = .161$. We also had significant effects of delay only on the related distractors (the distractors in the high category). Both RA (the replication in the more category) and RB (the replication in the less category) had significantly higher estimates after a delay, $M_{diff} = -.979$, $SE = .367$, $p < .01$, and $M_{diff} = -1.387$, $SE = .307$, $p < .001$, respectively. The opposite is true for the false distractors, where both estimates for FA (the replication in the more category) and FB (the replication in the less category) were not significantly different after a delay, $M_{diff} = -.238$, $SE = .196$, $p = .227$, and $M_{diff} = -.050$, $SE = .240$, $p = .835$, respectively. For the distractor category, it is important to remember that there was no theoretical difference between the "more" and "less" categories, which agrees with our results.

Planned Comparison

Methods

The analysis for the planned comparison was a 2 (age group: younger, older) x 2 (delay: tested immediately, tested after a delay) x 2 (character gist: healthy eater gist, unhealthy eater gist) x 2 (“target”/“distractor”: target, distractor) x 2 (“high”/“low”: high, low) x 2 (“less”/“more”: less, more) repeated measures ANOVA with country and delay as between-subjects variables and the character gist, “target”/“distractor,” “high”/“low,” and “less”/“more” as within-subjects variables. In this analysis, we only used those subjects aged 18-22 from both countries.

Results

As expected, we observed a main effect of target/distractor, $F(1, 883) = 1322.600$, $MSE = 16686.059$, $p < .001$, $\eta_p^2 = .600$. Frequency estimated for targets ($M = 5.291$, $SE = .094$) were significantly higher than those for distractors ($M = 1.828$, $SE = .099$). We also observed a main effect of “high”/”low”, $F(1, 883) = 830.922$, $MSE = 6896.970$, $p < .001$, $\eta_p^2 = .485$, and “more”/”less”, $F(1, 883) = 347.053$, $MSE = 2402.626$, $p < .001$, $\eta_p^2 = .282$. Items that were shown more times to the subject during the presentation were estimated to be higher than items that were shown fewer times. This pattern was maintained through significant, second-order target/distractor X “high”/”low”, $F(1, 883) = 29.697$, $MSE = 308.362$, $p < .001$, $\eta_p^2 = .033$, “high”/”low” X “more”/”less” interactions, $F(1, 883) = 41.579$, $MSE = 293.393$, $p < .001$, $\eta_p^2 = .045$, and target/distractor X “more”/”less” interactions, $F(1, 883) = 201.708$, $MSE = 1261.285$, $p < .001$, $\eta_p^2 = .186$. In the latter interaction, subjects gave higher estimates for “more” items from both targets and distractors. However, it should be noted that, for distractors, there was no theoretical difference between the items. There was no significant target/distractor X "high"/"low" X "more"/"less" interaction, $F(1, 883) = .055$, $MSE = .352$, $p = .814$, $\eta_p^2 = .000$.

There was a main effect of country, $F(1, 883) = 7.661$, $MSE = 300.03$, $p = .006$, $\eta_p^2 = .009$. Subjects from the US gave significantly higher estimates than subjects from Brazil. There was a significant "high"/"low" X country interaction, $F(1, 883) = 5.451$, $MSE = 45.244$, $p = .02$, $\eta_p^2 = .006$. Subjects from the US gave significantly higher estimates for "low" items but not for "high" items.

There was a significant target/distractor X delay interaction, $F(1, 883) = 15.832$, $MSE = 199.743$, $p < .001$, $\eta_p^2 = .018$. Subjects gave higher estimates for distractors after a delay but not for targets. There was a significant "high"/"low" X delay interaction, $F(1, 883) = 7.179$, $MSE = 59.592$, $p = .008$, $\eta_p^2 = .008$. Estimates made after a delay were significantly higher for "low" targets but not for "high" targets. There was a significant "more"/"less" X delay interaction, $F(1, 883) = 23.941$, $MSE = 165.743$, $p < .001$, $\eta_p^2 = .026$. Estimates made after a delay were significantly higher for "less" targets but not for "more" targets (see interactions below).

These interactions were further explored in significant 3, 4, and 5-way interactions. A 3-way target/distractor X "high"/"low" X delay interaction was present, $F(1, 883) = 58.243$, $MSE = 604.765$, $p < .001$, $\eta_p^2 = .062$, as well as a 3-way target/distractor X "more"/"less" X delay interaction, $F(1, 883) = 17.965$, $MSE = 112.3333$, $p < .001$, $\eta_p^2 = .020$, and a 3-way target/distractor X "more"/"less" X country interaction, $F(1, 883) = 8.221$, $MSE = 51.406$, $p < .01$, $\eta_p^2 = .009$. Our highest order interaction was a significant 4-way target/distractor X "high"/"low" X "more"/"less" X delay interaction, $F(1, 883) = 51.970$, $MSE = 331.462$, $p < .001$, $\eta_p^2 = .056$.

Our highest order interaction gave us a better picture of the effects of delay on our frequency estimates for the targets and distractors. For subjects who had a delay, there were significantly lower estimates for the target presented 12 times (the target in the high and more categories) compared to subjects without a delay, $M_{diff} = 2.654$, $SE = .340$, $p < .001$. There were also significantly higher estimates for the targets presented 5 times (the target in the high and less categories), $M_{diff} = -.704$, $SE = .275$, $p < .05$, and 2 times (the target in the low and more categories), $M_{diff} = -1.178$, $SE = .261$, $p < .001$. We found no significant effect of delay on the target presented 1 time (the target in the low and less categories), $M_{diff} = -.337$, $SE = .235$, $p = .152$. For our distractors, we see significant effects of delay only on the related distractors (the distractors in the high category). Both RA (the replication in the more category) and RB (the replication in the less category) had significantly higher estimates after a delay, $M_{diff} = -.967$, $SE = .272$, $p < .001$, and $M_{diff} = -1.236$, $SE = .252$, $p < .001$, respectively. The opposite is true for the false distractors, where both estimates for FA (the replication in the “more” category) and FB (the replication in the “less” category) were not significantly different after a delay, $M_{diff} = -.209$, $SE = .233$, $p = .370$, and $M_{diff} = -.184$, $SE = .227$, $p = .417$, respectively. For the distractor category, it is important to remember that there was no theoretical difference between the "more" and "less" categories, which agrees with our results.

S. Additional analyses with fully-crossed – Supplementary Tables

		Less	More
Target	High	Target presented 5 times	Target presented 12 times
	Low	Target presented 1 times	Target presented 2 times
Distractor	High	Related Distractor A	Related Distractor B
	Low	False Distractor A	False Distractor B

Table A1. Each target and distractor that was tested fit into this 2x8 cell paradigm based on their characteristics.

T. Repeated Measures ANOVA Output (Fully-crossed design – Experiment 1).

Within-Subjects Factors

Gist	TargetDistractor	HighLow	MoreLess	Dependent Variable
1 Healthy	1 Target	1 High	1 More	MAT5_replaced
			2 Less	MAT6_replaced
		2 Low	1 More	MAT7_replaced
			2 Less	MAT8_replaced
	2 Distractor	1 High	1 More	MAR3_replaced
			2 Less	MAR4_replaced
		2 Low	1 More	MAU3_replaced
			2 Less	MAU4_replaced
2 Unhealthy	1 Target	1 High	1 More	MCT1_replaced
			2 Less	MCT2_replaced
		2 Low	1 More	MCT3_replaced
			2 Less	MCT4_replaced
	2 Distractor	1 High	1 More	MCR1_replaced
			2 Less	MCR2_replaced
		2 Low	1 More	MCU1_replaced
			2 Less	MCU2_replaced

Between-Subjects Factors

		Value Label	N
Delay Condition	1	Immediate	465
	2	Delay	397
U.S. Age Groups	1	College-Age (18-22)	770
	2	Older (59+)	92

Descriptive Statistics

	Delay Condition	U.S. Age Groups	Mean	S.D.	N
Memory Task (Unhealthy) Target 5 (High frequency)	Immediate	College-Age (18-22)	9.95	3.865	418
		Older (59+)	8.17	4.819	47
		Total	9.77	4.002	465
	Delay	College-Age (18-22)	7.31	3.917	352
		Older (59+)	6.89	4.443	45

		Total	7.26	3.976	397
	Total	College-Age (18-22)	8.74	4.103	770
		Older (59+)	7.54	4.658	92
		Total	8.62	4.179	862
Memory Task (Unhealthy) Target 6	Immediate	College-Age (18-22)	4.65	2.649	418
		Older (59+)	5.05	3.297	47
		Total	4.69	2.720	465
	Delay	College-Age (18-22)	5.33	3.256	352
		Older (59+)	4.18	2.622	45
		Total	5.20	3.209	397
	Total	College-Age (18-22)	4.96	2.960	770
		Older (59+)	4.62	3.002	92
		Total	4.92	2.965	862
Memory Task (Unhealthy) Target 7	Immediate	College-Age (18-22)	4.20	2.733	418
		Older (59+)	3.87	3.852	47
		Total	4.16	2.862	465
	Delay	College-Age (18-22)	5.13	3.236	352
		Older (59+)	4.62	3.927	45
		Total	5.07	3.319	397
	Total	College-Age (18-22)	4.62	3.007	770
		Older (59+)	4.24	3.886	92
		Total	4.58	3.112	862
Memory Task (Unhealthy) Target 8 (Low frequency)	Immediate	College-Age (18-22)	3.39	2.723	418
		Older (59+)	2.25	2.366	47
		Total	3.27	2.709	465
	Delay	College-Age (18-22)	3.74	3.056	352
		Older (59+)	2.73	2.887	45
		Total	3.63	3.051	397
	Total	College-Age (18-22)	3.55	2.884	770
		Older (59+)	2.49	2.631	92
		Total	3.43	2.875	862
Memory Task (Unhealthy) Related Distractor 3	Immediate	College-Age (18-22)	2.26	2.511	418
		Older (59+)	2.47	3.005	47
		Total	2.28	2.563	465
	Delay	College-Age (18-22)	3.49	2.866	352
		Older (59+)	4.51	4.362	45
		Total	3.60	3.082	397

	Total	College-Age (18-22)	2.82	2.747	770
		Older (59+)	3.47	3.849	92
		Total	2.89	2.889	862
Memory Task (Unhealthy) Related Distractor 4	Immediate	College-Age (18-22)	1.42	2.538	418
		Older (59+)	2.18	3.072	47
		Total	1.50	2.603	465
	Delay	College-Age (18-22)	2.22	2.786	352
		Older (59+)	2.44	3.552	45
		Total	2.25	2.879	397
	Total	College-Age (18-22)	1.79	2.682	770
		Older (59+)	2.31	3.300	92
		Total	1.84	2.757	862
Memory Task (Unhealthy) False Distractor 3	Immediate	College-Age (18-22)	1.05	2.568	418
		Older (59+)	2.00	3.776	47
		Total	1.15	2.724	465
	Delay	College-Age (18-22)	1.59	2.808	352
		Older (59+)	1.71	3.375	45
		Total	1.60	2.873	397
	Total	College-Age (18-22)	1.30	2.692	770
		Older (59+)	1.86	3.569	92
		Total	1.36	2.802	862
Memory Task (Unhealthy) False Distractor 4	Immediate	College-Age (18-22)	1.05	2.594	418
		Older (59+)	2.55	4.848	47
		Total	1.20	2.929	465
	Delay	College-Age (18-22)	1.40	2.476	352
		Older (59+)	1.71	2.951	45
		Total	1.44	2.532	397
	Total	College-Age (18-22)	1.21	2.545	770
		Older (59+)	2.14	4.033	92
		Total	1.31	2.754	862
Memory Task (Healthy) Target 1 (High frequency)	Immediate	College-Age (18-22)	8.18	3.655	418
		Older (59+)	7.58	5.367	47
		Total	8.12	3.859	465
	Delay	College-Age (18-22)	6.62	3.400	352
		Older (59+)	7.51	4.934	45
		Total	6.72	3.610	397
	Total	College-Age (18-22)	7.46	3.623	770
		Older (59+)	7.54	5.132	92

		Total	7.47	3.809	862
Memory Task (Healthy) Target 2	Immediate	College-Age (18-22)	5.66	3.081	418
		Older (59+)	4.33	3.529	47
		Total	5.52	3.151	465
	Delay	College-Age (18-22)	6.62	3.430	352
		Older (59+)	6.13	4.032	45
		Total	6.56	3.501	397
	Total	College-Age (18-22)	6.10	3.278	770
		Older (59+)	5.21	3.870	92
		Total	6.00	3.355	862
Memory Task (Healthy) Target 3	Immediate	College-Age (18-22)	4.89	3.176	418
		Older (59+)	3.83	3.466	47
		Total	4.78	3.218	465
	Delay	College-Age (18-22)	5.62	3.162	352
		Older (59+)	4.33	3.736	45
		Total	5.47	3.252	397
	Total	College-Age (18-22)	5.22	3.188	770
		Older (59+)	4.08	3.589	92
		Total	5.10	3.250	862
Memory Task (Healthy) Target 4 (Low Frequency)	Immediate	College-Age (18-22)	3.11	2.597	418
		Older (59+)	2.88	2.943	47
		Total	3.09	2.632	465
	Delay	College-Age (18-22)	3.86	2.726	352
		Older (59+)	2.40	2.147	45
		Total	3.69	2.705	397
	Total	College-Age (18-22)	3.45	2.681	770
		Older (59+)	2.64	2.582	92
		Total	3.37	2.681	862
Memory Task (Healthy) Related Distractor 1	Immediate	College-Age (18-22)	2.68	2.961	418
		Older (59+)	3.28	3.646	47
		Total	2.74	3.038	465
	Delay	College-Age (18-22)	4.72	3.496	352
		Older (59+)	4.93	4.202	45
		Total	4.74	3.578	397
	Total	College-Age (18-22)	3.61	3.370	770
		Older (59+)	4.09	3.994	92
		Total	3.66	3.443	862
	Immediate	College-Age (18-22)	2.17	2.946	418

Memory Task (Healthy) Related Distractor 2		Older (59+)	3.40	3.370	47
		Total	2.29	3.011	465
	Delay	College-Age (18-22)	3.77	3.116	352
		Older (59+)	3.69	3.728	45
		Total	3.76	3.186	397
	Total	College-Age (18-22)	2.90	3.127	770
		Older (59+)	3.54	3.533	92
		Total	2.97	3.176	862
Memory Task (Healthy) False Distractor 1	Immediate	College-Age (18-22)	1.15	2.557	418
		Older (59+)	1.76	3.605	47
		Total	1.22	2.683	465
	Delay	College-Age (18-22)	1.30	2.299	352
		Older (59+)	1.13	2.546	45
		Total	1.28	2.325	397
	Total	College-Age (18-22)	1.22	2.442	770
		Older (59+)	1.45	3.131	92
		Total	1.25	2.523	862
Memory Task (Healthy) False Distractor 2	Immediate	College-Age (18-22)	1.12	2.378	418
		Older (59+)	.86	2.011	47
		Total	1.10	2.343	465
	Delay	College-Age (18-22)	1.71	2.738	352
		Older (59+)	1.20	2.222	45
		Total	1.65	2.687	397
	Total	College-Age (18-22)	1.39	2.564	770
		Older (59+)	1.02	2.112	92
		Total	1.35	2.521	862

Tests of Within-Subjects Effects

Source		Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Gist	Sphericity Assumed	61.265	1	61.265	10.842	.001	.012
	Greenhouse-Geisser	61.265	1.000	61.265	10.842	.001	.012

	Huynh-Feldt	61.265	1.000	61.265	10.842	.001	.012
	Lower-bound	61.265	1.000	61.265	10.842	.001	.012
Gist * Delay Condition	Sphericity Assumed	48.494	1	48.494	8.582	.003	.010
	Greenhouse-Geisser	48.494	1.000	48.494	8.582	.003	.010
	Huynh-Feldt	48.494	1.000	48.494	8.582	.003	.010
	Lower-bound	48.494	1.000	48.494	8.582	.003	.010
Gist * U.S. Age Groups	Sphericity Assumed	12.249	1	12.249	2.168	.141	.003
	Greenhouse-Geisser	12.249	1.000	12.249	2.168	.141	.003
	Huynh-Feldt	12.249	1.000	12.249	2.168	.141	.003
	Lower-bound	12.249	1.000	12.249	2.168	.141	.003
Gist * Delay Condition * U.S. Age Groups	Sphericity Assumed	.034	1	.034	.006	.938	.000
	Greenhouse-Geisser	.034	1.000	.034	.006	.938	.000
	Huynh-Feldt	.034	1.000	.034	.006	.938	.000
	Lower-bound	.034	1.000	.034	.006	.938	.000
Error(Gist)	Sphericity Assumed	4848.120	858	5.650			
	Greenhouse-Geisser	4848.120	858.000	5.650			
	Huynh-Feldt	4848.120	858.000	5.650			
	Lower-bound	4848.120	858.000	5.650			
TargetDistractor	Sphericity Assumed	10871.451	1	10871.451	785.016	.000	.478

	Greenhouse-Geisser	10871.451	1.000	10871.451	785.016	.000	.478
	Huynh-Feldt	10871.451	1.000	10871.451	785.016	.000	.478
	Lower-bound	10871.451	1.000	10871.451	785.016	.000	.478
TargetDistractor * Delay Condition	Sphericity Assumed	105.985	1	105.985	7.653	.006	.009
	Greenhouse-Geisser	105.985	1.000	105.985	7.653	.006	.009
	Huynh-Feldt	105.985	1.000	105.985	7.653	.006	.009
	Lower-bound	105.985	1.000	105.985	7.653	.006	.009
TargetDistractor * U.S. Age Groups	Sphericity Assumed	424.281	1	424.281	30.637	.000	.034
	Greenhouse-Geisser	424.281	1.000	424.281	30.637	.000	.034
	Huynh-Feldt	424.281	1.000	424.281	30.637	.000	.034
	Lower-bound	424.281	1.000	424.281	30.637	.000	.034
TargetDistractor * Delay Condition * U.S. Age Groups	Sphericity Assumed	33.059	1	33.059	2.387	.123	.003
	Greenhouse-Geisser	33.059	1.000	33.059	2.387	.123	.003
	Huynh-Feldt	33.059	1.000	33.059	2.387	.123	.003
	Lower-bound	33.059	1.000	33.059	2.387	.123	.003
Error(TargetDistractor)	Sphericity Assumed	11882.181	858	13.849			
	Greenhouse-Geisser	11882.181	858.000	13.849			
	Huynh-Feldt	11882.181	858.000	13.849			
	Lower-bound	11882.181	858.000	13.849			

HighLow	Sphericity Assumed	6218.967	1	6218.967	630.888	.000	.424
	Greenhouse-Geisser	6218.967	1.000	6218.967	630.888	.000	.424
	Huynh-Feldt	6218.967	1.000	6218.967	630.888	.000	.424
	Lower-bound	6218.967	1.000	6218.967	630.888	.000	.424
HighLow * Delay Condition	Sphericity Assumed	9.450	1	9.450	.959	.328	.001
	Greenhouse-Geisser	9.450	1.000	9.450	.959	.328	.001
	Huynh-Feldt	9.450	1.000	9.450	.959	.328	.001
	Lower-bound	9.450	1.000	9.450	.959	.328	.001
HighLow * U.S. Age Groups	Sphericity Assumed	22.177	1	22.177	2.250	.134	.003
	Greenhouse-Geisser	22.177	1.000	22.177	2.250	.134	.003
	Huynh-Feldt	22.177	1.000	22.177	2.250	.134	.003
	Lower-bound	22.177	1.000	22.177	2.250	.134	.003
HighLow * Delay Condition * U.S. Age Groups	Sphericity Assumed	35.621	1	35.621	3.614	.058	.004
	Greenhouse-Geisser	35.621	1.000	35.621	3.614	.058	.004
	Huynh-Feldt	35.621	1.000	35.621	3.614	.058	.004
	Lower-bound	35.621	1.000	35.621	3.614	.058	.004
Error(HighLow)	Sphericity Assumed	8457.726	858	9.857			
	Greenhouse-Geisser	8457.726	858.000	9.857			
	Huynh-Feldt	8457.726	858.000	9.857			

	Lower-bound	8457.726	858.000	9.857			
MoreLess	Sphericity Assumed	2005.284	1	2005.284	283.632	.000	.248
	Greenhouse-Geisser	2005.284	1.000	2005.284	283.632	.000	.248
	Huynh-Feldt	2005.284	1.000	2005.284	283.632	.000	.248
	Lower-bound	2005.284	1.000	2005.284	283.632	.000	.248
MoreLess * Delay Condition	Sphericity Assumed	11.564	1	11.564	1.636	.201	.002
	Greenhouse-Geisser	11.564	1.000	11.564	1.636	.201	.002
	Huynh-Feldt	11.564	1.000	11.564	1.636	.201	.002
	Lower-bound	11.564	1.000	11.564	1.636	.201	.002
MoreLess * U.S. Age Groups	Sphericity Assumed	3.838	1	3.838	.543	.461	.001
	Greenhouse-Geisser	3.838	1.000	3.838	.543	.461	.001
	Huynh-Feldt	3.838	1.000	3.838	.543	.461	.001
	Lower-bound	3.838	1.000	3.838	.543	.461	.001
MoreLess * Delay Condition * U.S. Age Groups	Sphericity Assumed	51.770	1	51.770	7.323	.007	.008
	Greenhouse-Geisser	51.770	1.000	51.770	7.323	.007	.008
	Huynh-Feldt	51.770	1.000	51.770	7.323	.007	.008
	Lower-bound	51.770	1.000	51.770	7.323	.007	.008
Error(MoreLess)	Sphericity Assumed	6066.075	858	7.070			
	Greenhouse-Geisser	6066.075	858.000	7.070			

	Huynh-Feldt	6066.075	858.000	7.070			
	Lower-bound	6066.075	858.000	7.070			
Gist * TargetDistractor	Sphericity Assumed	9.405	1	9.405	1.832	.176	.002
	Greenhouse-Geisser	9.405	1.000	9.405	1.832	.176	.002
	Huynh-Feldt	9.405	1.000	9.405	1.832	.176	.002
	Lower-bound	9.405	1.000	9.405	1.832	.176	.002
Gist * TargetDistractor * Delay Condition	Sphericity Assumed	6.793	1	6.793	1.323	.250	.002
	Greenhouse-Geisser	6.793	1.000	6.793	1.323	.250	.002
	Huynh-Feldt	6.793	1.000	6.793	1.323	.250	.002
	Lower-bound	6.793	1.000	6.793	1.323	.250	.002
Gist * TargetDistractor * U.S. Age Groups	Sphericity Assumed	18.779	1	18.779	3.659	.056	.004
	Greenhouse-Geisser	18.779	1.000	18.779	3.659	.056	.004
	Huynh-Feldt	18.779	1.000	18.779	3.659	.056	.004
	Lower-bound	18.779	1.000	18.779	3.659	.056	.004
Gist * TargetDistractor * Delay Condition * U.S. Age Groups	Sphericity Assumed	5.609	1	5.609	1.093	.296	.001
	Greenhouse-Geisser	5.609	1.000	5.609	1.093	.296	.001
	Huynh-Feldt	5.609	1.000	5.609	1.093	.296	.001
	Lower-bound	5.609	1.000	5.609	1.093	.296	.001
Error(Gist*TargetDistractor)	Sphericity Assumed	4403.694	858	5.133			

	Greenhouse-Geisser	4403.694	858.000	5.133			
	Huynh-Feldt	4403.694	858.000	5.133			
	Lower-bound	4403.694	858.000	5.133			
Gist * HighLow	Sphericity Assumed	143.220	1	143.220	27.203	.000	.031
	Greenhouse-Geisser	143.220	1.000	143.220	27.203	.000	.031
	Huynh-Feldt	143.220	1.000	143.220	27.203	.000	.031
	Lower-bound	143.220	1.000	143.220	27.203	.000	.031
Gist * HighLow * Delay Condition	Sphericity Assumed	59.925	1	59.925	11.382	.001	.013
	Greenhouse-Geisser	59.925	1.000	59.925	11.382	.001	.013
	Huynh-Feldt	59.925	1.000	59.925	11.382	.001	.013
	Lower-bound	59.925	1.000	59.925	11.382	.001	.013
Gist * HighLow * U.S. Age Groups	Sphericity Assumed	38.280	1	38.280	7.271	.007	.008
	Greenhouse-Geisser	38.280	1.000	38.280	7.271	.007	.008
	Huynh-Feldt	38.280	1.000	38.280	7.271	.007	.008
	Lower-bound	38.280	1.000	38.280	7.271	.007	.008
Gist * HighLow * Delay Condition * U.S. Age Groups	Sphericity Assumed	1.172	1	1.172	.223	.637	.000
	Greenhouse-Geisser	1.172	1.000	1.172	.223	.637	.000
	Huynh-Feldt	1.172	1.000	1.172	.223	.637	.000
	Lower-bound	1.172	1.000	1.172	.223	.637	.000

Error(Gist*HighLow)	Sphericity Assumed	4517.170	858	5.265			
	Greenhouse-Geisser	4517.170	858.000	5.265			
	Huynh-Feldt	4517.170	858.000	5.265			
	Lower-bound	4517.170	858.000	5.265			
TargetDistractor * HighLow	Sphericity Assumed	368.586	1	368.586	33.840	.000	.038
	Greenhouse-Geisser	368.586	1.000	368.586	33.840	.000	.038
	Huynh-Feldt	368.586	1.000	368.586	33.840	.000	.038
	Lower-bound	368.586	1.000	368.586	33.840	.000	.038
TargetDistractor * HighLow * Delay Condition	Sphericity Assumed	356.754	1	356.754	32.753	.000	.037
	Greenhouse-Geisser	356.754	1.000	356.754	32.753	.000	.037
	Huynh-Feldt	356.754	1.000	356.754	32.753	.000	.037
	Lower-bound	356.754	1.000	356.754	32.753	.000	.037
TargetDistractor * HighLow * U.S. Age Groups	Sphericity Assumed	1.030	1	1.030	.095	.758	.000
	Greenhouse-Geisser	1.030	1.000	1.030	.095	.758	.000
	Huynh-Feldt	1.030	1.000	1.030	.095	.758	.000
	Lower-bound	1.030	1.000	1.030	.095	.758	.000
TargetDistractor * HighLow * Delay Condition * U.S. Age Groups	Sphericity Assumed	5.282	1	5.282	.485	.486	.001
	Greenhouse-Geisser	5.282	1.000	5.282	.485	.486	.001
	Huynh-Feldt	5.282	1.000	5.282	.485	.486	.001

	Lower-bound	5.282	1.000	5.282	.485	.486	.001
Error(TargetDistractor*HighLow)	Sphericity Assumed	9345.478	858	10.892			
	Greenhouse-Geisser	9345.478	858.000	10.892			
	Huynh-Feldt	9345.478	858.000	10.892			
	Lower-bound	9345.478	858.000	10.892			
Gist * TargetDistractor * HighLow	Sphericity Assumed	138.198	1	138.198	21.892	.000	.025
	Greenhouse-Geisser	138.198	1.000	138.198	21.892	.000	.025
	Huynh-Feldt	138.198	1.000	138.198	21.892	.000	.025
	Lower-bound	138.198	1.000	138.198	21.892	.000	.025
Gist * TargetDistractor * HighLow * Delay Condition	Sphericity Assumed	41.753	1	41.753	6.614	.010	.008
	Greenhouse-Geisser	41.753	1.000	41.753	6.614	.010	.008
	Huynh-Feldt	41.753	1.000	41.753	6.614	.010	.008
	Lower-bound	41.753	1.000	41.753	6.614	.010	.008
Gist * TargetDistractor * HighLow * U.S. Age Groups	Sphericity Assumed	.279	1	.279	.044	.834	.000
	Greenhouse-Geisser	.279	1.000	.279	.044	.834	.000
	Huynh-Feldt	.279	1.000	.279	.044	.834	.000
	Lower-bound	.279	1.000	.279	.044	.834	.000
Gist * TargetDistractor * HighLow * Delay Condition * U.S. Age Groups	Sphericity Assumed	61.395	1	61.395	9.726	.002	.011
	Greenhouse-Geisser	61.395	1.000	61.395	9.726	.002	.011

	Huynh-Feldt	61.395	1.000	61.395	9.726	.002	.011
	Lower-bound	61.395	1.000	61.395	9.726	.002	.011
Error(Gist*TargetDistractor*HighLow)	Sphericity Assumed	5416.270	858	6.313			
	Greenhouse-Geisser	5416.270	858.000	6.313			
	Huynh-Feldt	5416.270	858.000	6.313			
	Lower-bound	5416.270	858.000	6.313			
Gist * MoreLess	Sphericity Assumed	51.121	1	51.121	9.837	.002	.011
	Greenhouse-Geisser	51.121	1.000	51.121	9.837	.002	.011
	Huynh-Feldt	51.121	1.000	51.121	9.837	.002	.011
	Lower-bound	51.121	1.000	51.121	9.837	.002	.011
Gist * MoreLess * Delay Condition	Sphericity Assumed	12.218	1	12.218	2.351	.126	.003
	Greenhouse-Geisser	12.218	1.000	12.218	2.351	.126	.003
	Huynh-Feldt	12.218	1.000	12.218	2.351	.126	.003
	Lower-bound	12.218	1.000	12.218	2.351	.126	.003
Gist * MoreLess * U.S. Age Groups	Sphericity Assumed	11.153	1	11.153	2.146	.143	.002
	Greenhouse-Geisser	11.153	1.000	11.153	2.146	.143	.002
	Huynh-Feldt	11.153	1.000	11.153	2.146	.143	.002
	Lower-bound	11.153	1.000	11.153	2.146	.143	.002
Gist * MoreLess * Delay Condition * U.S. Age Groups	Sphericity Assumed	6.551	1	6.551	1.261	.262	.001

	Greenhouse-Geisser	6.551	1.000	6.551	1.261	.262	.001
	Huynh-Feldt	6.551	1.000	6.551	1.261	.262	.001
	Lower-bound	6.551	1.000	6.551	1.261	.262	.001
Error(Gist*MoreLess)	Sphericity Assumed	4458.944	858	5.197			
	Greenhouse-Geisser	4458.944	858.000	5.197			
	Huynh-Feldt	4458.944	858.000	5.197			
	Lower-bound	4458.944	858.000	5.197			
TargetDistractor * MoreLess	Sphericity Assumed	817.639	1	817.639	120.614	.000	.123
	Greenhouse-Geisser	817.639	1.000	817.639	120.614	.000	.123
	Huynh-Feldt	817.639	1.000	817.639	120.614	.000	.123
	Lower-bound	817.639	1.000	817.639	120.614	.000	.123
TargetDistractor * MoreLess * Delay Condition	Sphericity Assumed	119.367	1	119.367	17.608	.000	.020
	Greenhouse-Geisser	119.367	1.000	119.367	17.608	.000	.020
	Huynh-Feldt	119.367	1.000	119.367	17.608	.000	.020
	Lower-bound	119.367	1.000	119.367	17.608	.000	.020
TargetDistractor * MoreLess * U.S. Age Groups	Sphericity Assumed	1.114	1	1.114	.164	.685	.000
	Greenhouse-Geisser	1.114	1.000	1.114	.164	.685	.000
	Huynh-Feldt	1.114	1.000	1.114	.164	.685	.000
	Lower-bound	1.114	1.000	1.114	.164	.685	.000

TargetDistractor * MoreLess * Delay Condition * U.S. Age Groups	Sphericity Assumed	5.833	1	5.833	.860	.354	.001
	Greenhouse-Geisser	5.833	1.000	5.833	.860	.354	.001
	Huynh-Feldt	5.833	1.000	5.833	.860	.354	.001
	Lower-bound	5.833	1.000	5.833	.860	.354	.001
Error(TargetDistractor*MoreLess)	Sphericity Assumed	5816.348	858	6.779			
	Greenhouse-Geisser	5816.348	858.000	6.779			
	Huynh-Feldt	5816.348	858.000	6.779			
	Lower-bound	5816.348	858.000	6.779			
Gist * TargetDistractor * MoreLess	Sphericity Assumed	22.671	1	22.671	4.011	.046	.005
	Greenhouse-Geisser	22.671	1.000	22.671	4.011	.046	.005
	Huynh-Feldt	22.671	1.000	22.671	4.011	.046	.005
	Lower-bound	22.671	1.000	22.671	4.011	.046	.005
Gist * TargetDistractor * MoreLess * Delay Condition	Sphericity Assumed	5.198	1	5.198	.919	.338	.001
	Greenhouse-Geisser	5.198	1.000	5.198	.919	.338	.001
	Huynh-Feldt	5.198	1.000	5.198	.919	.338	.001
	Lower-bound	5.198	1.000	5.198	.919	.338	.001
Gist * TargetDistractor * MoreLess * U.S. Age Groups	Sphericity Assumed	.081	1	.081	.014	.905	.000
	Greenhouse-Geisser	.081	1.000	.081	.014	.905	.000
	Huynh-Feldt	.081	1.000	.081	.014	.905	.000

	Lower-bound	.081	1.000	.081	.014	.905	.000
Gist * TargetDistractor * MoreLess * Delay Condition * U.S. Age Groups	Sphericity Assumed	.149	1	.149	.026	.871	.000
	Greenhouse-Geisser	.149	1.000	.149	.026	.871	.000
	Huynh-Feldt	.149	1.000	.149	.026	.871	.000
	Lower-bound	.149	1.000	.149	.026	.871	.000
Error(Gist*TargetDistractor*MoreLess)	Sphericity Assumed	4850.170	858	5.653			
	Greenhouse-Geisser	4850.170	858.000	5.653			
	Huynh-Feldt	4850.170	858.000	5.653			
	Lower-bound	4850.170	858.000	5.653			
HighLow * MoreLess	Sphericity Assumed	291.510	1	291.510	43.745	.000	.049
	Greenhouse-Geisser	291.510	1.000	291.510	43.745	.000	.049
	Huynh-Feldt	291.510	1.000	291.510	43.745	.000	.049
	Lower-bound	291.510	1.000	291.510	43.745	.000	.049
HighLow * MoreLess * Delay Condition	Sphericity Assumed	35.458	1	35.458	5.321	.021	.006
	Greenhouse-Geisser	35.458	1.000	35.458	5.321	.021	.006
	Huynh-Feldt	35.458	1.000	35.458	5.321	.021	.006
	Lower-bound	35.458	1.000	35.458	5.321	.021	.006
HighLow * MoreLess * U.S. Age Groups	Sphericity Assumed	.402	1	.402	.060	.806	.000
	Greenhouse-Geisser	.402	1.000	.402	.060	.806	.000

	Huynh-Feldt	.402	1.000	.402	.060	.806	.000
	Lower-bound	.402	1.000	.402	.060	.806	.000
HighLow * MoreLess * Delay Condition * U.S. Age Groups	Sphericity Assumed	36.289	1	36.289	5.446	.020	.006
	Greenhouse-Geisser	36.289	1.000	36.289	5.446	.020	.006
	Huynh-Feldt	36.289	1.000	36.289	5.446	.020	.006
	Lower-bound	36.289	1.000	36.289	5.446	.020	.006
Error(HighLow*MoreLess)	Sphericity Assumed	5717.628	858	6.664			
	Greenhouse-Geisser	5717.628	858.000	6.664			
	Huynh-Feldt	5717.628	858.000	6.664			
	Lower-bound	5717.628	858.000	6.664			
Gist * HighLow * MoreLess	Sphericity Assumed	113.115	1	113.115	19.170	.000	.022
	Greenhouse-Geisser	113.115	1.000	113.115	19.170	.000	.022
	Huynh-Feldt	113.115	1.000	113.115	19.170	.000	.022
	Lower-bound	113.115	1.000	113.115	19.170	.000	.022
Gist * HighLow * MoreLess * Delay Condition	Sphericity Assumed	1.177	1	1.177	.199	.655	.000
	Greenhouse-Geisser	1.177	1.000	1.177	.199	.655	.000
	Huynh-Feldt	1.177	1.000	1.177	.199	.655	.000
	Lower-bound	1.177	1.000	1.177	.199	.655	.000
Gist * HighLow * MoreLess * U.S. Age Groups	Sphericity Assumed	11.380	1	11.380	1.929	.165	.002

	Greenhouse-Geisser	11.380	1.000	11.380	1.929	.165	.002
	Huynh-Feldt	11.380	1.000	11.380	1.929	.165	.002
	Lower-bound	11.380	1.000	11.380	1.929	.165	.002
Gist * HighLow * MoreLess * Delay Condition * U.S. Age Groups	Sphericity Assumed	12.155	1	12.155	2.060	.152	.002
	Greenhouse-Geisser	12.155	1.000	12.155	2.060	.152	.002
	Huynh-Feldt	12.155	1.000	12.155	2.060	.152	.002
	Lower-bound	12.155	1.000	12.155	2.060	.152	.002
Error(Gist*HighLow*MoreLess)	Sphericity Assumed	5062.802	858	5.901			
	Greenhouse-Geisser	5062.802	858.000	5.901			
	Huynh-Feldt	5062.802	858.000	5.901			
	Lower-bound	5062.802	858.000	5.901			
TargetDistractor * HighLow * MoreLess	Sphericity Assumed	1.794	1	1.794	.274	.601	.000
	Greenhouse-Geisser	1.794	1.000	1.794	.274	.601	.000
	Huynh-Feldt	1.794	1.000	1.794	.274	.601	.000
	Lower-bound	1.794	1.000	1.794	.274	.601	.000
TargetDistractor * HighLow * MoreLess * Delay Condition	Sphericity Assumed	273.303	1	273.303	41.696	.000	.046
	Greenhouse-Geisser	273.303	1.000	273.303	41.696	.000	.046
	Huynh-Feldt	273.303	1.000	273.303	41.696	.000	.046
	Lower-bound	273.303	1.000	273.303	41.696	.000	.046

TargetDistractor * HighLow * MoreLess * U.S. Age Groups	Sphericity Assumed	.366	1	.366	.056	.813	.000
	Greenhouse-Geisser	.366	1.000	.366	.056	.813	.000
	Huynh-Feldt	.366	1.000	.366	.056	.813	.000
	Lower-bound	.366	1.000	.366	.056	.813	.000
TargetDistractor * HighLow * MoreLess * Delay Condition * U.S. Age Groups	Sphericity Assumed	.244	1	.244	.037	.847	.000
	Greenhouse-Geisser	.244	1.000	.244	.037	.847	.000
	Huynh-Feldt	.244	1.000	.244	.037	.847	.000
	Lower-bound	.244	1.000	.244	.037	.847	.000
Error(TargetDistractor*HighLow*MoreLess)	Sphericity Assumed	5623.912	858	6.555			
	Greenhouse-Geisser	5623.912	858.000	6.555			
	Huynh-Feldt	5623.912	858.000	6.555			
	Lower-bound	5623.912	858.000	6.555			
Gist * TargetDistractor * HighLow * MoreLess	Sphericity Assumed	20.590	1	20.590	3.639	.057	.004
	Greenhouse-Geisser	20.590	1.000	20.590	3.639	.057	.004
	Huynh-Feldt	20.590	1.000	20.590	3.639	.057	.004
	Lower-bound	20.590	1.000	20.590	3.639	.057	.004
Gist * TargetDistractor * HighLow * MoreLess * Delay Condition	Sphericity Assumed	7.964	1	7.964	1.408	.236	.002
	Greenhouse-Geisser	7.964	1.000	7.964	1.408	.236	.002
	Huynh-Feldt	7.964	1.000	7.964	1.408	.236	.002

	Lower-bound	7.964	1.000	7.964	1.408	.236	.002
Gist * TargetDistractor * HighLow * MoreLess * U.S. Age Groups	Sphericity Assumed	83.138	1	83.138	14.694	.000	.017
	Greenhouse-Geisser	83.138	1.000	83.138	14.694	.000	.017
	Huynh-Feldt	83.138	1.000	83.138	14.694	.000	.017
	Lower-bound	83.138	1.000	83.138	14.694	.000	.017
Gist * TargetDistractor * HighLow * MoreLess * Delay Condition * U.S. Age Groups	Sphericity Assumed	20.948	1	20.948	3.702	.055	.004
	Greenhouse-Geisser	20.948	1.000	20.948	3.702	.055	.004
	Huynh-Feldt	20.948	1.000	20.948	3.702	.055	.004
	Lower-bound	20.948	1.000	20.948	3.702	.055	.004
Error(Gist*TargetDistractor*HighLow*MoreLess)	Sphericity Assumed	4854.491	858	5.658			
	Greenhouse-Geisser	4854.491	858.000	5.658			
	Huynh-Feldt	4854.491	858.000	5.658			
	Lower-bound	4854.491	858.000	5.658			

Tests of Between-Subjects Effects

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Intercept	72584.069	1	72584.069	1742.358	.000	.670
Delay Condition	160.678	1	160.678	3.857	.050	.004
U.S. Age Groups	29.263	1	29.263	.702	.402	.001
Delay Condition * U.S. Age Groups	18.321	1	18.321	.440	.507	.001
Error	35743.025	858	41.659			

U. Repeated Measures ANOVA Output (Fully-crossed design - Experiment 2).

Within-Subjects Factors

Gist	TargetDistractor	HighLow	MoreLess	Dependent Variable
1 Healthy	1 Target	1 High	1 More	MAT5_replaced
			2 Less	MAT6_replaced
		2 Low	1 More	MAT7_replaced
			2 Less	MAT8_replaced
	2 Distractor	1 High	1 More	MAR3_replaced
			2 Less	MAR4_replaced
		2 Low	1 More	MAU3_replaced
			2 Less	MAU4_replaced
2 Unhealthy	1 Target	1 High	1 More	MCT1_replaced
			2 Less	MCT2_replaced
		2 Low	1 More	MCT3_replaced
			2 Less	MCT4_replaced
	2 Distractor	1 High	1 More	MCR1_replaced
			2 Less	MCR2_replaced
		2 Low	1 More	MCU1_replaced
			2 Less	MCU2_replaced

Between-Subjects Factors

		Value Label	N
Delay Condition	1	Immediate	148
	2	Delay	102
Brazilian Age Groups	1	College-Aged (18-22)	117
	2	Post-College (23+)	133

Descriptive Statistics

	Delay Condition	Brazilian Age Groups	Mean	S.D.	N
Memory Task (Unhealthy) Target 5 (High frequency)	Immediate	College-Aged (18-22)	8.99	4.526	82
		Post-College (23+)	7.73	3.484	66
		Total	8.43	4.129	148
	Delay	College-Aged (18-22)	6.34	3.548	35
		Post-College (23+)	6.43	3.764	67
		Total	6.40	3.674	102

	Total	College-Aged (18-22)	8.20	4.412	117
		Post-College (23+)	7.07	3.673	133
		Total	7.60	4.067	250
Memory Task (Unhealthy) Target 6	Immediate	College-Aged (18-22)	4.60	2.845	82
		Post-College (23+)	4.38	2.217	66
		Total	4.50	2.578	148
	Delay	College-Aged (18-22)	5.00	2.722	35
		Post-College (23+)	4.91	3.274	67
		Total	4.94	3.082	102
	Total	College-Aged (18-22)	4.72	2.803	117
		Post-College (23+)	4.65	2.802	133
		Total	4.68	2.797	250
Memory Task (Unhealthy) Target 7	Immediate	College-Aged (18-22)	3.90	2.883	82
		Post-College (23+)	3.75	1.980	66
		Total	3.83	2.514	148
	Delay	College-Aged (18-22)	4.91	2.672	35
		Post-College (23+)	5.06	3.289	67
		Total	5.01	3.078	102
	Total	College-Aged (18-22)	4.21	2.848	117
		Post-College (23+)	4.41	2.788	133
		Total	4.31	2.812	250
Memory Task (Unhealthy) Target 8 (Low frequency)	Immediate	College-Aged (18-22)	2.52	2.144	82
		Post-College (23+)	2.18	1.456	66
		Total	2.37	1.871	148
	Delay	College-Aged (18-22)	2.69	2.111	35
		Post-College (23+)	3.01	2.788	67
		Total	2.90	2.570	102
	Total	College-Aged (18-22)	2.57	2.127	117
		Post-College (23+)	2.60	2.259	133
		Total	2.59	2.194	250
Memory Task (Unhealthy) Related Distractor 3	Immediate	College-Aged (18-22)	4.01	5.453	82
		Post-College (23+)	1.89	2.962	66
		Total	3.07	4.624	148
	Delay	College-Aged (18-22)	3.43	3.257	35
		Post-College (23+)	4.19	3.913	67
		Total	3.93	3.702	102
	Total	College-Aged (18-22)	3.84	4.894	117

		Post-College (23+)	3.05	3.648	133
		Total	3.42	4.285	250
Memory Task (Unhealthy) Related Distractor 4	Immediate	College-Aged (18-22)	1.20	2.163	82
		Post-College (23+)	1.11	2.268	66
		Total	1.16	2.203	148
	Delay	College-Aged (18-22)	2.20	1.967	35
		Post-College (23+)	1.94	2.959	67
		Total	2.03	2.653	102
	Total	College-Aged (18-22)	1.50	2.148	117
		Post-College (23+)	1.53	2.662	133
		Total	1.51	2.430	250
Memory Task (Unhealthy) False Distractor 3	Immediate	College-Aged (18-22)	.73	2.250	82
		Post-College (23+)	.46	1.560	66
		Total	.61	1.971	148
	Delay	College-Aged (18-22)	.45	1.063	35
		Post-College (23+)	.67	1.450	67
		Total	.59	1.329	102
	Total	College-Aged (18-22)	.65	1.971	117
		Post-College (23+)	.57	1.504	133
		Total	.61	1.735	250
Memory Task (Unhealthy) False Distractor 4	Immediate	College-Aged (18-22)	1.04	2.971	82
		Post-College (23+)	.71	1.975	66
		Total	.89	2.572	148
	Delay	College-Aged (18-22)	1.06	1.970	35
		Post-College (23+)	1.04	2.345	67
		Total	1.05	2.213	102
	Total	College-Aged (18-22)	1.04	2.702	117
		Post-College (23+)	.88	2.167	133
		Total	.96	2.429	250
Memory Task (Healthy) Target 1 (High frequency)	Immediate	College-Aged (18-22)	10.17	4.714	82
		Post-College (23+)	8.50	3.630	66
		Total	9.43	4.332	148
	Delay	College-Aged (18-22)	6.40	3.957	35
		Post-College (23+)	7.16	3.828	67
		Total	6.90	3.870	102
	Total	College-Aged (18-22)	9.04	4.807	117
		Post-College (23+)	7.83	3.777	133
		Total	8.40	4.324	250

Memory Task (Healthy) Target 2	Immediate	College-Aged (18-22)	4.83	2.730	82
		Post-College (23+)	4.86	2.385	66
		Total	4.84	2.573	148
	Delay	College-Aged (18-22)	5.60	3.483	35
		Post-College (23+)	5.55	3.225	67
		Total	5.57	3.299	102
	Total	College-Aged (18-22)	5.06	2.981	117
		Post-College (23+)	5.21	2.850	133
		Total	5.14	2.907	250
Memory Task (Healthy) Target 3	Immediate	College-Aged (18-22)	4.07	2.675	82
		Post-College (23+)	4.18	3.220	66
		Total	4.12	2.921	148
	Delay	College-Aged (18-22)	6.11	3.428	35
		Post-College (23+)	5.04	3.179	67
		Total	5.41	3.290	102
	Total	College-Aged (18-22)	4.68	3.053	117
		Post-College (23+)	4.61	3.216	133
		Total	4.65	3.135	250
Memory Task (Healthy) Target 4 (Low Frequency)	Immediate	College-Aged (18-22)	2.43	2.160	82
		Post-College (23+)	2.23	2.429	66
		Total	2.34	2.278	148
	Delay	College-Aged (18-22)	2.51	2.571	35
		Post-College (23+)	2.57	2.432	67
		Total	2.55	2.468	102
	Total	College-Aged (18-22)	2.45	2.280	117
		Post-College (23+)	2.40	2.428	133
		Total	2.42	2.355	250
Memory Task (Healthy) Related Distractor 1	Immediate	College-Aged (18-22)	1.61	2.182	82
		Post-College (23+)	1.50	2.348	66
		Total	1.56	2.250	148
	Delay	College-Aged (18-22)	2.80	2.709	35
		Post-College (23+)	2.51	2.648	67
		Total	2.61	2.659	102
	Total	College-Aged (18-22)	1.97	2.403	117
		Post-College (23+)	2.01	2.545	133
		Total	1.99	2.475	250
	Immediate	College-Aged (18-22)	1.89	2.753	82
		Post-College (23+)	1.68	2.655	66

Memory Task (Healthy) Related Distractor 2		Total	1.80	2.703	148
	Delay	College-Aged (18-22)	3.43	2.933	35
		Post-College (23+)	3.85	3.731	67
		Total	3.71	3.469	102
	Total	College-Aged (18-22)	2.35	2.884	117
		Post-College (23+)	2.77	3.408	133
		Total	2.58	3.174	250
Memory Task (Healthy) False Distractor 1	Immediate	College-Aged (18-22)	.22	.969	82
		Post-College (23+)	.41	1.617	66
		Total	.30	1.297	148
	Delay	College-Aged (18-22)	.66	1.211	35
		Post-College (23+)	1.00	2.309	67
		Total	.88	2.001	102
	Total	College-Aged (18-22)	.35	1.061	117
		Post-College (23+)	.71	2.011	133
		Total	.54	1.643	250
Memory Task (Healthy) False Distractor 2	Immediate	College-Aged (18-22)	.45	1.751	82
		Post-College (23+)	.39	1.357	66
		Total	.43	1.583	148
	Delay	College-Aged (18-22)	.23	.731	35
		Post-College (23+)	.46	1.259	67
		Total	.38	1.108	102
	Total	College-Aged (18-22)	.38	1.519	117
		Post-College (23+)	.43	1.304	133
		Total	.41	1.406	250

Tests of Within-Subjects Effects

Source		Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Gist	Sphericity Assumed	6.820	1	6.820	1.678	.196	.007
	Greenhouse-Geisser	6.820	1.000	6.820	1.678	.196	.007
	Huynh-Feldt	6.820	1.000	6.820	1.678	.196	.007

	Lower-bound	6.820	1.000	6.820	1.678	.196	.007
Gist * Delay Condition	Sphericity Assumed	4.752	1	4.752	1.170	.281	.005
	Greenhouse-Geisser	4.752	1.000	4.752	1.170	.281	.005
	Huynh-Feldt	4.752	1.000	4.752	1.170	.281	.005
	Lower-bound	4.752	1.000	4.752	1.170	.281	.005
Gist * Brazilian Age Groups	Sphericity Assumed	3.814	1	3.814	.939	.334	.004
	Greenhouse-Geisser	3.814	1.000	3.814	.939	.334	.004
	Huynh-Feldt	3.814	1.000	3.814	.939	.334	.004
	Lower-bound	3.814	1.000	3.814	.939	.334	.004
Gist * Delay Condition * Brazilian Age Groups	Sphericity Assumed	11.745	1	11.745	2.890	.090	.012
	Greenhouse-Geisser	11.745	1.000	11.745	2.890	.090	.012
	Huynh-Feldt	11.745	1.000	11.745	2.890	.090	.012
	Lower-bound	11.745	1.000	11.745	2.890	.090	.012
Error(Gist)	Sphericity Assumed	999.597	246	4.063			
	Greenhouse-Geisser	999.597	246.000	4.063			
	Huynh-Feldt	999.597	246.000	4.063			
	Lower-bound	999.597	246.000	4.063			
TargetDistractor	Sphericity Assumed	10559.024	1	10559.024	953.021	.000	.795
	Greenhouse-Geisser	10559.024	1.000	10559.024	953.021	.000	.795

	Huynh-Feldt	10559.024	1.000	10559.024	953.021	.000	.795
	Lower-bound	10559.024	1.000	10559.024	953.021	.000	.795
TargetDistractor * Delay Condition	Sphericity Assumed	99.558	1	99.558	8.986	.003	.035
	Greenhouse-Geisser	99.558	1.000	99.558	8.986	.003	.035
	Huynh-Feldt	99.558	1.000	99.558	8.986	.003	.035
	Lower-bound	99.558	1.000	99.558	8.986	.003	.035
TargetDistractor * Brazilian Age Groups	Sphericity Assumed	3.460	1	3.460	.312	.577	.001
	Greenhouse-Geisser	3.460	1.000	3.460	.312	.577	.001
	Huynh-Feldt	3.460	1.000	3.460	.312	.577	.001
	Lower-bound	3.460	1.000	3.460	.312	.577	.001
TargetDistractor * Delay Condition * Brazilian Age Groups	Sphericity Assumed	.258	1	.258	.023	.879	.000
	Greenhouse-Geisser	.258	1.000	.258	.023	.879	.000
	Huynh-Feldt	.258	1.000	.258	.023	.879	.000
	Lower-bound	.258	1.000	.258	.023	.879	.000
Error(TargetDistractor)	Sphericity Assumed	2725.565	246	11.080			
	Greenhouse-Geisser	2725.565	246.000	11.080			
	Huynh-Feldt	2725.565	246.000	11.080			
	Lower-bound	2725.565	246.000	11.080			
HighLow	Sphericity Assumed	4770.031	1	4770.031	580.231	.000	.702

	Greenhouse-Geisser	4770.031	1.000	4770.031	580.231	.000	.702
	Huynh-Feldt	4770.031	1.000	4770.031	580.231	.000	.702
	Lower-bound	4770.031	1.000	4770.031	580.231	.000	.702
HighLow * Delay Condition	Sphericity Assumed	21.986	1	21.986	2.674	.103	.011
	Greenhouse-Geisser	21.986	1.000	21.986	2.674	.103	.011
	Huynh-Feldt	21.986	1.000	21.986	2.674	.103	.011
	Lower-bound	21.986	1.000	21.986	2.674	.103	.011
HighLow * Brazilian Age Groups	Sphericity Assumed	10.725	1	10.725	1.305	.254	.005
	Greenhouse-Geisser	10.725	1.000	10.725	1.305	.254	.005
	Huynh-Feldt	10.725	1.000	10.725	1.305	.254	.005
	Lower-bound	10.725	1.000	10.725	1.305	.254	.005
HighLow * Delay Condition * Brazilian Age Groups	Sphericity Assumed	28.639	1	28.639	3.484	.063	.014
	Greenhouse-Geisser	28.639	1.000	28.639	3.484	.063	.014
	Huynh-Feldt	28.639	1.000	28.639	3.484	.063	.014
	Lower-bound	28.639	1.000	28.639	3.484	.063	.014
Error(HighLow)	Sphericity Assumed	2022.345	246	8.221			
	Greenhouse-Geisser	2022.345	246.000	8.221			
	Huynh-Feldt	2022.345	246.000	8.221			
	Lower-bound	2022.345	246.000	8.221			

MoreLess	Sphericity Assumed	1611.613	1	1611.613	219.349	.000	.471
	Greenhouse-Geisser	1611.613	1.000	1611.613	219.349	.000	.471
	Huynh-Feldt	1611.613	1.000	1611.613	219.349	.000	.471
	Lower-bound	1611.613	1.000	1611.613	219.349	.000	.471
MoreLess * Delay Condition	Sphericity Assumed	64.139	1	64.139	8.730	.003	.034
	Greenhouse-Geisser	64.139	1.000	64.139	8.730	.003	.034
	Huynh-Feldt	64.139	1.000	64.139	8.730	.003	.034
	Lower-bound	64.139	1.000	64.139	8.730	.003	.034
MoreLess * Brazilian Age Groups	Sphericity Assumed	11.121	1	11.121	1.514	.220	.006
	Greenhouse-Geisser	11.121	1.000	11.121	1.514	.220	.006
	Huynh-Feldt	11.121	1.000	11.121	1.514	.220	.006
	Lower-bound	11.121	1.000	11.121	1.514	.220	.006
MoreLess * Delay Condition * Brazilian Age Groups	Sphericity Assumed	15.613	1	15.613	2.125	.146	.009
	Greenhouse-Geisser	15.613	1.000	15.613	2.125	.146	.009
	Huynh-Feldt	15.613	1.000	15.613	2.125	.146	.009
	Lower-bound	15.613	1.000	15.613	2.125	.146	.009
Error(MoreLess)	Sphericity Assumed	1807.427	246	7.347			
	Greenhouse-Geisser	1807.427	246.000	7.347			
	Huynh-Feldt	1807.427	246.000	7.347			

	Lower-bound	1807.427	246.000	7.347			
Gist * TargetDistractor	Sphericity Assumed	69.389	1	69.389	11.550	.001	.045
	Greenhouse-Geisser	69.389	1.000	69.389	11.550	.001	.045
	Huynh-Feldt	69.389	1.000	69.389	11.550	.001	.045
	Lower-bound	69.389	1.000	69.389	11.550	.001	.045
Gist * TargetDistractor * Delay Condition	Sphericity Assumed	11.281	1	11.281	1.878	.172	.008
	Greenhouse-Geisser	11.281	1.000	11.281	1.878	.172	.008
	Huynh-Feldt	11.281	1.000	11.281	1.878	.172	.008
	Lower-bound	11.281	1.000	11.281	1.878	.172	.008
Gist * TargetDistractor * Brazilian Age Groups	Sphericity Assumed	8.611	1	8.611	1.433	.232	.006
	Greenhouse-Geisser	8.611	1.000	8.611	1.433	.232	.006
	Huynh-Feldt	8.611	1.000	8.611	1.433	.232	.006
	Lower-bound	8.611	1.000	8.611	1.433	.232	.006
Gist * TargetDistractor * Delay Condition * Brazilian Age Groups	Sphericity Assumed	2.264	1	2.264	.377	.540	.002
	Greenhouse-Geisser	2.264	1.000	2.264	.377	.540	.002
	Huynh-Feldt	2.264	1.000	2.264	.377	.540	.002
	Lower-bound	2.264	1.000	2.264	.377	.540	.002
Error(Gist*TargetDistractor)	Sphericity Assumed	1477.929	246	6.008			
	Greenhouse-Geisser	1477.929	246.000	6.008			

	Huynh-Feldt	1477.929	246.000	6.008			
	Lower-bound	1477.929	246.000	6.008			
Gist * HighLow	Sphericity Assumed	24.200	1	24.200	5.746	.017	.023
	Greenhouse-Geisser	24.200	1.000	24.200	5.746	.017	.023
	Huynh-Feldt	24.200	1.000	24.200	5.746	.017	.023
	Lower-bound	24.200	1.000	24.200	5.746	.017	.023
Gist * HighLow * Delay Condition	Sphericity Assumed	1.087	1	1.087	.258	.612	.001
	Greenhouse-Geisser	1.087	1.000	1.087	.258	.612	.001
	Huynh-Feldt	1.087	1.000	1.087	.258	.612	.001
	Lower-bound	1.087	1.000	1.087	.258	.612	.001
Gist * HighLow * Brazilian Age Groups	Sphericity Assumed	3.820	1	3.820	.907	.342	.004
	Greenhouse-Geisser	3.820	1.000	3.820	.907	.342	.004
	Huynh-Feldt	3.820	1.000	3.820	.907	.342	.004
	Lower-bound	3.820	1.000	3.820	.907	.342	.004
Gist * HighLow * Delay Condition * Brazilian Age Groups	Sphericity Assumed	.684	1	.684	.162	.687	.001
	Greenhouse-Geisser	.684	1.000	.684	.162	.687	.001
	Huynh-Feldt	.684	1.000	.684	.162	.687	.001
	Lower-bound	.684	1.000	.684	.162	.687	.001
Error(Gist*HighLow)	Sphericity Assumed	1036.097	246	4.212			

	Greenhouse-Geisser	1036.097	246.000	4.212			
	Huynh-Feldt	1036.097	246.000	4.212			
	Lower-bound	1036.097	246.000	4.212			
TargetDistractor * HighLow	Sphericity Assumed	199.215	1	199.215	18.683	.000	.071
	Greenhouse-Geisser	199.215	1.000	199.215	18.683	.000	.071
	Huynh-Feldt	199.215	1.000	199.215	18.683	.000	.071
	Lower-bound	199.215	1.000	199.215	18.683	.000	.071
TargetDistractor * HighLow * Delay Condition	Sphericity Assumed	412.093	1	412.093	38.648	.000	.136
	Greenhouse-Geisser	412.093	1.000	412.093	38.648	.000	.136
	Huynh-Feldt	412.093	1.000	412.093	38.648	.000	.136
	Lower-bound	412.093	1.000	412.093	38.648	.000	.136
TargetDistractor * HighLow * Brazilian Age Groups	Sphericity Assumed	.802	1	.802	.075	.784	.000
	Greenhouse-Geisser	.802	1.000	.802	.075	.784	.000
	Huynh-Feldt	.802	1.000	.802	.075	.784	.000
	Lower-bound	.802	1.000	.802	.075	.784	.000
TargetDistractor * HighLow * Delay Condition * Brazilian Age Groups	Sphericity Assumed	3.101	1	3.101	.291	.590	.001
	Greenhouse-Geisser	3.101	1.000	3.101	.291	.590	.001
	Huynh-Feldt	3.101	1.000	3.101	.291	.590	.001
	Lower-bound	3.101	1.000	3.101	.291	.590	.001

Error(TargetDistractor*HighLow)	Sphericity Assumed	2623.055	246	10.663			
	Greenhouse-Geisser	2623.055	246.000	10.663			
	Huynh-Feldt	2623.055	246.000	10.663			
	Lower-bound	2623.055	246.000	10.663			
Gist * TargetDistractor * HighLow	Sphericity Assumed	3.374	1	3.374	.797	.373	.003
	Greenhouse-Geisser	3.374	1.000	3.374	.797	.373	.003
	Huynh-Feldt	3.374	1.000	3.374	.797	.373	.003
	Lower-bound	3.374	1.000	3.374	.797	.373	.003
Gist * TargetDistractor * HighLow * Delay Condition	Sphericity Assumed	5.042	1	5.042	1.191	.276	.005
	Greenhouse-Geisser	5.042	1.000	5.042	1.191	.276	.005
	Huynh-Feldt	5.042	1.000	5.042	1.191	.276	.005
	Lower-bound	5.042	1.000	5.042	1.191	.276	.005
Gist * TargetDistractor * HighLow * Brazilian Age Groups	Sphericity Assumed	1.339	1	1.339	.316	.574	.001
	Greenhouse-Geisser	1.339	1.000	1.339	.316	.574	.001
	Huynh-Feldt	1.339	1.000	1.339	.316	.574	.001
	Lower-bound	1.339	1.000	1.339	.316	.574	.001
Gist * TargetDistractor * HighLow * Delay Condition * Brazilian Age Groups	Sphericity Assumed	19.411	1	19.411	4.584	.033	.018
	Greenhouse-Geisser	19.411	1.000	19.411	4.584	.033	.018
	Huynh-Feldt	19.411	1.000	19.411	4.584	.033	.018

	Lower-bound	19.411	1.000	19.411	4.584	.033	.018
Error(Gist*TargetDistractor*HighLow)	Sphericity Assumed	1041.623	246	4.234			
	Greenhouse-Geisser	1041.623	246.000	4.234			
	Huynh-Feldt	1041.623	246.000	4.234			
	Lower-bound	1041.623	246.000	4.234			
Gist * MoreLess	Sphericity Assumed	14.033	1	14.033	3.396	.067	.014
	Greenhouse-Geisser	14.033	1.000	14.033	3.396	.067	.014
	Huynh-Feldt	14.033	1.000	14.033	3.396	.067	.014
	Lower-bound	14.033	1.000	14.033	3.396	.067	.014
Gist * MoreLess * Delay Condition	Sphericity Assumed	.091	1	.091	.022	.882	.000
	Greenhouse-Geisser	.091	1.000	.091	.022	.882	.000
	Huynh-Feldt	.091	1.000	.091	.022	.882	.000
	Lower-bound	.091	1.000	.091	.022	.882	.000
Gist * MoreLess * Brazilian Age Groups	Sphericity Assumed	.141	1	.141	.034	.854	.000
	Greenhouse-Geisser	.141	1.000	.141	.034	.854	.000
	Huynh-Feldt	.141	1.000	.141	.034	.854	.000
	Lower-bound	.141	1.000	.141	.034	.854	.000
Gist * MoreLess * Delay Condition * Brazilian Age Groups	Sphericity Assumed	13.776	1	13.776	3.333	.069	.013
	Greenhouse-Geisser	13.776	1.000	13.776	3.333	.069	.013

	Huynh-Feldt	13.776	1.000	13.776	3.333	.069	.013
	Lower-bound	13.776	1.000	13.776	3.333	.069	.013
Error(Gist*MoreLess)	Sphericity Assumed	1016.695	246	4.133			
	Greenhouse-Geisser	1016.695	246.000	4.133			
	Huynh-Feldt	1016.695	246.000	4.133			
	Lower-bound	1016.695	246.000	4.133			
TargetDistractor * MoreLess	Sphericity Assumed	1081.281	1	1081.281	246.208	.000	.500
	Greenhouse-Geisser	1081.281	1.000	1081.281	246.208	.000	.500
	Huynh-Feldt	1081.281	1.000	1081.281	246.208	.000	.500
	Lower-bound	1081.281	1.000	1081.281	246.208	.000	.500
TargetDistractor * MoreLess * Delay Condition	Sphericity Assumed	40.380	1	40.380	9.194	.003	.036
	Greenhouse-Geisser	40.380	1.000	40.380	9.194	.003	.036
	Huynh-Feldt	40.380	1.000	40.380	9.194	.003	.036
	Lower-bound	40.380	1.000	40.380	9.194	.003	.036
TargetDistractor * MoreLess * Brazilian Age Groups	Sphericity Assumed	2.287	1	2.287	.521	.471	.002
	Greenhouse-Geisser	2.287	1.000	2.287	.521	.471	.002
	Huynh-Feldt	2.287	1.000	2.287	.521	.471	.002
	Lower-bound	2.287	1.000	2.287	.521	.471	.002
TargetDistractor * MoreLess * Delay Condition * Brazilian Age Groups	Sphericity Assumed	.114	1	.114	.026	.872	.000

	Greenhouse-Geisser	.114	1.000	.114	.026	.872	.000
	Huynh-Feldt	.114	1.000	.114	.026	.872	.000
	Lower-bound	.114	1.000	.114	.026	.872	.000
Error(TargetDistractor*MoreLess)	Sphericity Assumed	1080.367	246	4.392			
	Greenhouse-Geisser	1080.367	246.000	4.392			
	Huynh-Feldt	1080.367	246.000	4.392			
	Lower-bound	1080.367	246.000	4.392			
Gist * TargetDistractor * MoreLess	Sphericity Assumed	96.944	1	96.944	18.404	.000	.070
	Greenhouse-Geisser	96.944	1.000	96.944	18.404	.000	.070
	Huynh-Feldt	96.944	1.000	96.944	18.404	.000	.070
	Lower-bound	96.944	1.000	96.944	18.404	.000	.070
Gist * TargetDistractor * MoreLess * Delay Condition	Sphericity Assumed	.528	1	.528	.100	.752	.000
	Greenhouse-Geisser	.528	1.000	.528	.100	.752	.000
	Huynh-Feldt	.528	1.000	.528	.100	.752	.000
	Lower-bound	.528	1.000	.528	.100	.752	.000
Gist * TargetDistractor * MoreLess * Brazilian Age Groups	Sphericity Assumed	1.487	1	1.487	.282	.596	.001
	Greenhouse-Geisser	1.487	1.000	1.487	.282	.596	.001
	Huynh-Feldt	1.487	1.000	1.487	.282	.596	.001
	Lower-bound	1.487	1.000	1.487	.282	.596	.001

Gist * TargetDistractor * MoreLess * Delay Condition * Brazilian Age Groups	Sphericity Assumed	17.246	1	17.246	3.274	.072	.013
	Greenhouse-Geisser	17.246	1.000	17.246	3.274	.072	.013
	Huynh-Feldt	17.246	1.000	17.246	3.274	.072	.013
	Lower-bound	17.246	1.000	17.246	3.274	.072	.013
Error(Gist*TargetDistractor*MoreLess)	Sphericity Assumed	1295.810	246	5.268			
	Greenhouse-Geisser	1295.810	246.000	5.268			
	Huynh-Feldt	1295.810	246.000	5.268			
	Lower-bound	1295.810	246.000	5.268			
HighLow * MoreLess	Sphericity Assumed	97.952	1	97.952	11.452	.001	.044
	Greenhouse-Geisser	97.952	1.000	97.952	11.452	.001	.044
	Huynh-Feldt	97.952	1.000	97.952	11.452	.001	.044
	Lower-bound	97.952	1.000	97.952	11.452	.001	.044
HighLow * MoreLess * Delay Condition	Sphericity Assumed	274.297	1	274.297	32.069	.000	.115
	Greenhouse-Geisser	274.297	1.000	274.297	32.069	.000	.115
	Huynh-Feldt	274.297	1.000	274.297	32.069	.000	.115
	Lower-bound	274.297	1.000	274.297	32.069	.000	.115
HighLow * MoreLess * Brazilian Age Groups	Sphericity Assumed	9.128	1	9.128	1.067	.303	.004
	Greenhouse-Geisser	9.128	1.000	9.128	1.067	.303	.004
	Huynh-Feldt	9.128	1.000	9.128	1.067	.303	.004

	Lower-bound	9.128	1.000	9.128	1.067	.303	.004
HighLow * MoreLess * Delay Condition * Brazilian Age Groups	Sphericity Assumed	52.792	1	52.792	6.172	.014	.024
	Greenhouse-Geisser	52.792	1.000	52.792	6.172	.014	.024
	Huynh-Feldt	52.792	1.000	52.792	6.172	.014	.024
	Lower-bound	52.792	1.000	52.792	6.172	.014	.024
Error(HighLow*MoreLess)	Sphericity Assumed	2104.157	246	8.553			
	Greenhouse-Geisser	2104.157	246.000	8.553			
	Huynh-Feldt	2104.157	246.000	8.553			
	Lower-bound	2104.157	246.000	8.553			
Gist * HighLow * MoreLess	Sphericity Assumed	160.152	1	160.152	31.289	.000	.113
	Greenhouse-Geisser	160.152	1.000	160.152	31.289	.000	.113
	Huynh-Feldt	160.152	1.000	160.152	31.289	.000	.113
	Lower-bound	160.152	1.000	160.152	31.289	.000	.113
Gist * HighLow * MoreLess * Delay Condition	Sphericity Assumed	29.969	1	29.969	5.855	.016	.023
	Greenhouse-Geisser	29.969	1.000	29.969	5.855	.016	.023
	Huynh-Feldt	29.969	1.000	29.969	5.855	.016	.023
	Lower-bound	29.969	1.000	29.969	5.855	.016	.023
Gist * HighLow * MoreLess * Brazilian Age Groups	Sphericity Assumed	1.113	1	1.113	.218	.641	.001
	Greenhouse-Geisser	1.113	1.000	1.113	.218	.641	.001

	Huynh-Feldt	1.113	1.000	1.113	.218	.641	.001
	Lower-bound	1.113	1.000	1.113	.218	.641	.001
Gist * HighLow * MoreLess * Delay Condition * Brazilian Age Groups	Sphericity Assumed	1.234	1	1.234	.241	.624	.001
	Greenhouse-Geisser	1.234	1.000	1.234	.241	.624	.001
	Huynh-Feldt	1.234	1.000	1.234	.241	.624	.001
	Lower-bound	1.234	1.000	1.234	.241	.624	.001
Error(Gist*HighLow*MoreLess)	Sphericity Assumed	1259.156	246	5.119			
	Greenhouse-Geisser	1259.156	246.000	5.119			
	Huynh-Feldt	1259.156	246.000	5.119			
	Lower-bound	1259.156	246.000	5.119			
TargetDistractor * HighLow * MoreLess	Sphericity Assumed	.104	1	.104	.018	.893	.000
	Greenhouse-Geisser	.104	1.000	.104	.018	.893	.000
	Huynh-Feldt	.104	1.000	.104	.018	.893	.000
	Lower-bound	.104	1.000	.104	.018	.893	.000
TargetDistractor * HighLow * MoreLess * Delay Condition	Sphericity Assumed	146.018	1	146.018	25.580	.000	.094
	Greenhouse-Geisser	146.018	1.000	146.018	25.580	.000	.094
	Huynh-Feldt	146.018	1.000	146.018	25.580	.000	.094
	Lower-bound	146.018	1.000	146.018	25.580	.000	.094
TargetDistractor * HighLow * MoreLess * Brazilian Age Groups	Sphericity Assumed	1.545	1	1.545	.271	.603	.001

	Greenhouse-Geisser	1.545	1.000	1.545	.271	.603	.001
	Huynh-Feldt	1.545	1.000	1.545	.271	.603	.001
	Lower-bound	1.545	1.000	1.545	.271	.603	.001
TargetDistractor * HighLow * MoreLess * Delay Condition * Brazilian Age Groups	Sphericity Assumed	9.834	1	9.834	1.723	.191	.007
	Greenhouse-Geisser	9.834	1.000	9.834	1.723	.191	.007
	Huynh-Feldt	9.834	1.000	9.834	1.723	.191	.007
	Lower-bound	9.834	1.000	9.834	1.723	.191	.007
Error(TargetDistractor*HighLow*MoreLess)	Sphericity Assumed	1404.259	246	5.708			
	Greenhouse-Geisser	1404.259	246.000	5.708			
	Huynh-Feldt	1404.259	246.000	5.708			
	Lower-bound	1404.259	246.000	5.708			
Gist * TargetDistractor * HighLow * MoreLess	Sphericity Assumed	90.734	1	90.734	16.135	.000	.062
	Greenhouse-Geisser	90.734	1.000	90.734	16.135	.000	.062
	Huynh-Feldt	90.734	1.000	90.734	16.135	.000	.062
	Lower-bound	90.734	1.000	90.734	16.135	.000	.062
Gist * TargetDistractor * HighLow * MoreLess * Delay Condition	Sphericity Assumed	.026	1	.026	.005	.946	.000
	Greenhouse-Geisser	.026	1.000	.026	.005	.946	.000
	Huynh-Feldt	.026	1.000	.026	.005	.946	.000
	Lower-bound	.026	1.000	.026	.005	.946	.000

Gist * TargetDistractor * HighLow * MoreLess * Brazilian Age Groups	Sphericity Assumed	.195	1	.195	.035	.852	.000
	Greenhouse-Geisser	.195	1.000	.195	.035	.852	.000
	Huynh-Feldt	.195	1.000	.195	.035	.852	.000
	Lower-bound	.195	1.000	.195	.035	.852	.000
Gist * TargetDistractor * HighLow * MoreLess * Delay Condition * Brazilian Age Groups	Sphericity Assumed	30.869	1	30.869	5.489	.020	.022
	Greenhouse-Geisser	30.869	1.000	30.869	5.489	.020	.022
	Huynh-Feldt	30.869	1.000	30.869	5.489	.020	.022
	Lower-bound	30.869	1.000	30.869	5.489	.020	.022
Error(Gist*TargetDistractor*HighLow*MoreLess)	Sphericity Assumed	1383.380	246	5.623			
	Greenhouse-Geisser	1383.380	246.000	5.623			
	Huynh-Feldt	1383.380	246.000	5.623			
	Lower-bound	1383.380	246.000	5.623			

Tests of Between-Subjects Effects

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Intercept	38114.497	1	38114.497	1127.947	.000	.821
Delay Condition	99.101	1	99.101	2.933	.088	.012
Brazilian Age Groups	22.953	1	22.953	.679	.411	.003
Delay Condition * Brazilian Age Groups	60.479	1	60.479	1.790	.182	.007
Error	8312.596	246	33.791			

V. Repeated Measures ANOVA Output (Fully-crossed design – cultural comparison).

Within-Subjects Factors

Gist	TargetDistractor	HighLow	MoreLess	Dependent Variable
1 Healthy	1 Target	1 High	1 More	MAT5_replaced
			2 Less	MAT6_replaced
		2 Low	1 More	MAT7_replaced
			2 Less	MAT8_replaced
	2 Distractor	1 High	1 More	MAR3_replaced
			2 Less	MAR4_replaced
		2 Low	1 More	MAU3_replaced
			2 Less	MAU4_replaced
2 Unhealthy	1 Target	1 High	1 More	MCT1_replaced
			2 Less	MCT2_replaced
		2 Low	1 More	MCT3_replaced
			2 Less	MCT4_replaced
	2 Distractor	1 High	1 More	MCR1_replaced
			2 Less	MCR2_replaced
		2 Low	1 More	MCU1_replaced
			2 Less	MCU2_replaced

Between-Subjects Factors

		Value Label	N
Delay Condition	1.00	Immediate	500
	2.00	Delay	387
Country	1.00	US	770
	2.00	Brazil	117

Descriptive Statistics

	Delay Condition	Country	Mean	S.D.	N
Memory Task (Unhealthy) Target 5 (High frequency)	Immediate	US	9.95	3.865	418
		Brazil	8.99	4.526	82
		Total	9.79	3.992	500
	Delay	US	7.31	3.917	352
		Brazil	6.34	3.548	35

		Total	7.22	3.891	387
	Total	US	8.74	4.103	770
		Brazil	8.20	4.412	117
		Total	8.67	4.147	887
Memory Task (Unhealthy) Target 6	Immediate	US	4.65	2.649	418
		Brazil	4.60	2.845	82
		Total	4.64	2.680	500
	Delay	US	5.33	3.256	352
		Brazil	5.00	2.722	35
		Total	5.30	3.210	387
	Total	US	4.96	2.960	770
		Brazil	4.72	2.803	117
		Total	4.93	2.939	887
Memory Task (Unhealthy) Target 7	Immediate	US	4.20	2.733	418
		Brazil	3.90	2.883	82
		Total	4.15	2.757	500
	Delay	US	5.13	3.236	352
		Brazil	4.91	2.672	35
		Total	5.11	3.186	387
	Total	US	4.62	3.007	770
		Brazil	4.21	2.848	117
		Total	4.57	2.988	887
Memory Task (Unhealthy) Target 8 (Low frequency)	Immediate	US	3.39	2.723	418
		Brazil	2.52	2.144	82
		Total	3.24	2.654	500
	Delay	US	3.74	3.056	352
		Brazil	2.69	2.111	35
		Total	3.64	2.996	387
	Total	US	3.55	2.884	770
		Brazil	2.57	2.127	117
		Total	3.42	2.814	887
Memory Task (Unhealthy) Related Distractor 3	Immediate	US	2.26	2.511	418
		Brazil	4.01	5.453	82
		Total	2.55	3.243	500
	Delay	US	3.49	2.866	352
		Brazil	3.43	3.257	35
		Total	3.48	2.899	387

	Total	US	2.82	2.747	770
		Brazil	3.84	4.894	117
		Total	2.95	3.131	887
Memory Task (Unhealthy) Related Distractor 4	Immediate	US	1.42	2.538	418
		Brazil	1.20	2.163	82
		Total	1.39	2.480	500
	Delay	US	2.22	2.786	352
		Brazil	2.20	1.967	35
		Total	2.22	2.720	387
	Total	US	1.79	2.682	770
		Brazil	1.50	2.148	117
		Total	1.75	2.619	887
Memory Task (Unhealthy) False Distractor 3	Immediate	US	1.05	2.568	418
		Brazil	.73	2.250	82
		Total	1.00	2.519	500
	Delay	US	1.59	2.808	352
		Brazil	.45	1.063	35
		Total	1.49	2.716	387
	Total	US	1.30	2.692	770
		Brazil	.65	1.971	117
		Total	1.21	2.617	887
Memory Task (Unhealthy) False Distractor 4	Immediate	US	1.05	2.594	418
		Brazil	1.04	2.971	82
		Total	1.05	2.656	500
	Delay	US	1.40	2.476	352
		Brazil	1.06	1.970	35
		Total	1.37	2.434	387
	Total	US	1.21	2.545	770
		Brazil	1.04	2.702	117
		Total	1.19	2.565	887
Memory Task (Healthy) Target 1 (High frequency)	Immediate	US	8.18	3.655	418
		Brazil	10.17	4.714	82
		Total	8.50	3.913	500
	Delay	US	6.62	3.400	352
		Brazil	6.40	3.957	35
		Total	6.60	3.449	387
	Total	US	7.46	3.623	770
		Brazil	9.04	4.807	117

		Total	7.67	3.835	887
Memory Task (Healthy) Target 2	Immediate	US	5.66	3.081	418
		Brazil	4.83	2.730	82
		Total	5.52	3.039	500
	Delay	US	6.62	3.430	352
		Brazil	5.60	3.483	35
		Total	6.53	3.443	387
	Total	US	6.10	3.278	770
		Brazil	5.06	2.981	117
		Total	5.96	3.258	887
Memory Task (Healthy) Target 3	Immediate	US	4.89	3.176	418
		Brazil	4.07	2.675	82
		Total	4.76	3.112	500
	Delay	US	5.62	3.162	352
		Brazil	6.11	3.428	35
		Total	5.66	3.185	387
	Total	US	5.22	3.188	770
		Brazil	4.68	3.053	117
		Total	5.15	3.174	887
Memory Task (Healthy) Target 4 (Low Frequency)	Immediate	US	3.11	2.597	418
		Brazil	2.43	2.160	82
		Total	3.00	2.541	500
	Delay	US	3.86	2.726	352
		Brazil	2.51	2.571	35
		Total	3.74	2.737	387
	Total	US	3.45	2.681	770
		Brazil	2.45	2.280	117
		Total	3.32	2.652	887
Memory Task (Healthy) Related Distractor 1	Immediate	US	2.68	2.961	418
		Brazil	1.61	2.182	82
		Total	2.51	2.873	500
	Delay	US	4.72	3.496	352
		Brazil	2.80	2.709	35
		Total	4.54	3.473	387
	Total	US	3.61	3.370	770
		Brazil	1.97	2.403	117
		Total	3.40	3.305	887
	Immediate	US	2.17	2.946	418

Memory Task (Healthy) Related Distractor 2		Brazil	1.89	2.753	82
		Total	2.12	2.915	500
	Delay	US	3.77	3.116	352
		Brazil	3.43	2.933	35
		Total	3.74	3.097	387
	Total	US	2.90	3.127	770
		Brazil	2.35	2.884	117
		Total	2.83	3.100	887
Memory Task (Healthy) False Distractor 1	Immediate	US	1.15	2.557	418
		Brazil	.22	.969	82
		Total	1.00	2.395	500
	Delay	US	1.30	2.299	352
		Brazil	.66	1.211	35
		Total	1.24	2.229	387
	Total	US	1.22	2.442	770
		Brazil	.35	1.061	117
		Total	1.11	2.326	887
Memory Task (Healthy) False Distractor 2	Immediate	US	1.12	2.378	418
		Brazil	.45	1.751	82
		Total	1.01	2.299	500
	Delay	US	1.71	2.738	352
		Brazil	.23	.731	35
		Total	1.57	2.654	387
	Total	US	1.39	2.564	770
		Brazil	.38	1.519	117
		Total	1.26	2.474	887

Tests of Within-Subjects Effects

Source		Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Gist	Sphericity Assumed	38.913	1	38.913	7.562	.006	.008
	Greenhouse-Geisser	38.913	1.000	38.913	7.562	.006	.008
	Huynh-Feldt	38.913	1.000	38.913	7.562	.006	.008
	Lower-bound	38.913	1.000	38.913	7.562	.006	.008
	Sphericity Assumed	48.552	1	48.552	9.435	.002	.011

Gist * Delay Condition	Greenhouse-Geisser	48.552	1.000	48.552	9.435	.002	.011
	Huynh-Feldt	48.552	1.000	48.552	9.435	.002	.011
	Lower-bound	48.552	1.000	48.552	9.435	.002	.011
Gist * Country	Sphericity Assumed	29.383	1	29.383	5.710	.017	.006
	Greenhouse-Geisser	29.383	1.000	29.383	5.710	.017	.006
	Huynh-Feldt	29.383	1.000	29.383	5.710	.017	.006
	Lower-bound	29.383	1.000	29.383	5.710	.017	.006
Gist * Delay Condition * Country	Sphericity Assumed	9.203E-5	1	9.203E-5	.000	.997	.000
	Greenhouse-Geisser	9.203E-5	1.000	9.203E-5	.000	.997	.000
	Huynh-Feldt	9.203E-5	1.000	9.203E-5	.000	.997	.000
	Lower-bound	9.203E-5	1.000	9.203E-5	.000	.997	.000
Error(Gist)	Sphericity Assumed	4543.664	883	5.146			
	Greenhouse-Geisser	4543.664	883.000	5.146			
	Huynh-Feldt	4543.664	883.000	5.146			
	Lower-bound	4543.664	883.000	5.146			
TargetDistractor	Sphericity Assumed	16686.059	1	16686.059	1322.600	.000	.600
	Greenhouse-Geisser	16686.059	1.000	16686.059	1322.600	.000	.600
	Huynh-Feldt	16686.059	1.000	16686.059	1322.600	.000	.600
	Lower-bound	16686.059	1.000	16686.059	1322.600	.000	.600
TargetDistractor * Delay Condition	Sphericity Assumed	199.743	1	199.743	15.832	.000	.018
	Greenhouse-Geisser	199.743	1.000	199.743	15.832	.000	.018
	Huynh-Feldt	199.743	1.000	199.743	15.832	.000	.018
	Lower-bound	199.743	1.000	199.743	15.832	.000	.018
TargetDistractor * Country	Sphericity Assumed	.430	1	.430	.034	.854	.000
	Greenhouse-Geisser	.430	1.000	.430	.034	.854	.000
	Huynh-Feldt	.430	1.000	.430	.034	.854	.000
	Lower-bound	.430	1.000	.430	.034	.854	.000
TargetDistractor * Delay Condition * Country	Sphericity Assumed	5.670	1	5.670	.449	.503	.001
	Greenhouse-Geisser	5.670	1.000	5.670	.449	.503	.001
	Huynh-Feldt	5.670	1.000	5.670	.449	.503	.001
	Lower-bound	5.670	1.000	5.670	.449	.503	.001

Error(TargetDistractor)	Sphericity Assumed	11140.021	883	12.616			
	Greenhouse-Geisser	11140.021	883.000	12.616			
	Huynh-Feldt	11140.021	883.000	12.616			
	Lower-bound	11140.021	883.000	12.616			
HighLow	Sphericity Assumed	6896.970	1	6896.970	830.922	.000	.485
	Greenhouse-Geisser	6896.970	1.000	6896.970	830.922	.000	.485
	Huynh-Feldt	6896.970	1.000	6896.970	830.922	.000	.485
	Lower-bound	6896.970	1.000	6896.970	830.922	.000	.485
HighLow * Delay Condition	Sphericity Assumed	59.592	1	59.592	7.179	.008	.008
	Greenhouse-Geisser	59.592	1.000	59.592	7.179	.008	.008
	Huynh-Feldt	59.592	1.000	59.592	7.179	.008	.008
	Lower-bound	59.592	1.000	59.592	7.179	.008	.008
HighLow * Country	Sphericity Assumed	45.244	1	45.244	5.451	.020	.006
	Greenhouse-Geisser	45.244	1.000	45.244	5.451	.020	.006
	Huynh-Feldt	45.244	1.000	45.244	5.451	.020	.006
	Lower-bound	45.244	1.000	45.244	5.451	.020	.006
HighLow * Delay Condition * Country	Sphericity Assumed	22.474	1	22.474	2.708	.100	.003
	Greenhouse-Geisser	22.474	1.000	22.474	2.708	.100	.003
	Huynh-Feldt	22.474	1.000	22.474	2.708	.100	.003
	Lower-bound	22.474	1.000	22.474	2.708	.100	.003
Error(HighLow)	Sphericity Assumed	7329.235	883	8.300			
	Greenhouse-Geisser	7329.235	883.000	8.300			
	Huynh-Feldt	7329.235	883.000	8.300			
	Lower-bound	7329.235	883.000	8.300			
MoreLess	Sphericity Assumed	2402.626	1	2402.626	347.053	.000	.282
	Greenhouse-Geisser	2402.626	1.000	2402.626	347.053	.000	.282

	Huynh-Feldt	2402.626	1.000	2402.626	347.053	.000	.282
	Lower-bound	2402.626	1.000	2402.626	347.053	.000	.282
MoreLess * Delay Condition	Sphericity Assumed	165.743	1	165.743	23.941	.000	.026
	Greenhouse-Geisser	165.743	1.000	165.743	23.941	.000	.026
	Huynh-Feldt	165.743	1.000	165.743	23.941	.000	.026
	Lower-bound	165.743	1.000	165.743	23.941	.000	.026
MoreLess * Country	Sphericity Assumed	24.422	1	24.422	3.528	.061	.004
	Greenhouse-Geisser	24.422	1.000	24.422	3.528	.061	.004
	Huynh-Feldt	24.422	1.000	24.422	3.528	.061	.004
	Lower-bound	24.422	1.000	24.422	3.528	.061	.004
MoreLess * Delay Condition * Country	Sphericity Assumed	3.874	1	3.874	.560	.455	.001
	Greenhouse-Geisser	3.874	1.000	3.874	.560	.455	.001
	Huynh-Feldt	3.874	1.000	3.874	.560	.455	.001
	Lower-bound	3.874	1.000	3.874	.560	.455	.001
Error(MoreLess)	Sphericity Assumed	6112.957	883	6.923			
	Greenhouse-Geisser	6112.957	883.000	6.923			
	Huynh-Feldt	6112.957	883.000	6.923			
	Lower-bound	6112.957	883.000	6.923			
Gist * TargetDistractor	Sphericity Assumed	10.120	1	10.120	1.965	.161	.002
	Greenhouse-Geisser	10.120	1.000	10.120	1.965	.161	.002
	Huynh-Feldt	10.120	1.000	10.120	1.965	.161	.002
	Lower-bound	10.120	1.000	10.120	1.965	.161	.002
Gist * TargetDistractor * Delay Condition	Sphericity Assumed	8.383	1	8.383	1.628	.202	.002
	Greenhouse-Geisser	8.383	1.000	8.383	1.628	.202	.002
	Huynh-Feldt	8.383	1.000	8.383	1.628	.202	.002
	Lower-bound	8.383	1.000	8.383	1.628	.202	.002
Gist * TargetDistractor * Country	Sphericity Assumed	116.597	1	116.597	22.645	.000	.025
	Greenhouse-Geisser	116.597	1.000	116.597	22.645	.000	.025
	Huynh-Feldt	116.597	1.000	116.597	22.645	.000	.025
	Lower-bound	116.597	1.000	116.597	22.645	.000	.025
Gist * TargetDistractor *	Sphericity Assumed	9.861	1	9.861	1.915	.167	.002
	Greenhouse-Geisser	9.861	1.000	9.861	1.915	.167	.002
	Huynh-Feldt	9.861	1.000	9.861	1.915	.167	.002

Delay Condition * Country	Lower-bound	9.861	1.000	9.861	1.915	.167	.002
Error(Gist*TargetDistractor)	Sphericity Assumed	4546.417	883	5.149			
	Greenhouse-Geisser	4546.417	883.000	5.149			
	Huynh-Feldt	4546.417	883.000	5.149			
	Lower-bound	4546.417	883.000	5.149			
Gist * HighLow	Sphericity Assumed	23.179	1	23.179	4.478	.035	.005
	Greenhouse-Geisser	23.179	1.000	23.179	4.478	.035	.005
	Huynh-Feldt	23.179	1.000	23.179	4.478	.035	.005
	Lower-bound	23.179	1.000	23.179	4.478	.035	.005
Gist * HighLow * Delay Condition	Sphericity Assumed	12.677	1	12.677	2.449	.118	.003
	Greenhouse-Geisser	12.677	1.000	12.677	2.449	.118	.003
	Huynh-Feldt	12.677	1.000	12.677	2.449	.118	.003
	Lower-bound	12.677	1.000	12.677	2.449	.118	.003
Gist * HighLow * Country	Sphericity Assumed	1.288	1	1.288	.249	.618	.000
	Greenhouse-Geisser	1.288	1.000	1.288	.249	.618	.000
	Huynh-Feldt	1.288	1.000	1.288	.249	.618	.000
	Lower-bound	1.288	1.000	1.288	.249	.618	.000
Gist * HighLow * Delay Condition * Country	Sphericity Assumed	10.842	1	10.842	2.095	.148	.002
	Greenhouse-Geisser	10.842	1.000	10.842	2.095	.148	.002
	Huynh-Feldt	10.842	1.000	10.842	2.095	.148	.002
	Lower-bound	10.842	1.000	10.842	2.095	.148	.002
Error(Gist*HighLow)	Sphericity Assumed	4570.283	883	5.176			
	Greenhouse-Geisser	4570.283	883.000	5.176			
	Huynh-Feldt	4570.283	883.000	5.176			
	Lower-bound	4570.283	883.000	5.176			
TargetDistractor * HighLow	Sphericity Assumed	308.362	1	308.362	29.697	.000	.033
	Greenhouse-Geisser	308.362	1.000	308.362	29.697	.000	.033
	Huynh-Feldt	308.362	1.000	308.362	29.697	.000	.033
	Lower-bound	308.362	1.000	308.362	29.697	.000	.033
	Sphericity Assumed	604.765	1	604.765	58.243	.000	.062
	Greenhouse-Geisser	604.765	1.000	604.765	58.243	.000	.062

TargetDistractor * HighLow * Delay Condition	Huynh-Feldt	604.765	1.000	604.765	58.243	.000	.062
	Lower-bound	604.765	1.000	604.765	58.243	.000	.062
TargetDistractor * HighLow * Country	Sphericity Assumed	1.335	1	1.335	.129	.720	.000
	Greenhouse-Geisser	1.335	1.000	1.335	.129	.720	.000
	Huynh-Feldt	1.335	1.000	1.335	.129	.720	.000
	Lower-bound	1.335	1.000	1.335	.129	.720	.000
TargetDistractor * HighLow * Delay Condition * Country	Sphericity Assumed	7.760	1	7.760	.747	.388	.001
	Greenhouse-Geisser	7.760	1.000	7.760	.747	.388	.001
	Huynh-Feldt	7.760	1.000	7.760	.747	.388	.001
	Lower-bound	7.760	1.000	7.760	.747	.388	.001
Error(TargetDistractor *HighLow)	Sphericity Assumed	9168.622	883	10.383			
	Greenhouse-Geisser	9168.622	883.000	10.383			
	Huynh-Feldt	9168.622	883.000	10.383			
	Lower-bound	9168.622	883.000	10.383			
Gist * TargetDistractor * HighLow	Sphericity Assumed	28.691	1	28.691	4.797	.029	.005
	Greenhouse-Geisser	28.691	1.000	28.691	4.797	.029	.005
	Huynh-Feldt	28.691	1.000	28.691	4.797	.029	.005
	Lower-bound	28.691	1.000	28.691	4.797	.029	.005
Gist * TargetDistractor * HighLow * Delay Condition	Sphericity Assumed	23.369	1	23.369	3.907	.048	.004
	Greenhouse-Geisser	23.369	1.000	23.369	3.907	.048	.004
	Huynh-Feldt	23.369	1.000	23.369	3.907	.048	.004
	Lower-bound	23.369	1.000	23.369	3.907	.048	.004
Gist * TargetDistractor * HighLow * Country	Sphericity Assumed	38.438	1	38.438	6.427	.011	.007
	Greenhouse-Geisser	38.438	1.000	38.438	6.427	.011	.007
	Huynh-Feldt	38.438	1.000	38.438	6.427	.011	.007
	Lower-bound	38.438	1.000	38.438	6.427	.011	.007
Gist * TargetDistractor * HighLow * Delay Condition * Country	Sphericity Assumed	11.697	1	11.697	1.956	.162	.002
	Greenhouse-Geisser	11.697	1.000	11.697	1.956	.162	.002
	Huynh-Feldt	11.697	1.000	11.697	1.956	.162	.002
	Lower-bound	11.697	1.000	11.697	1.956	.162	.002
Error(Gist*TargetDistractor*HighLow)	Sphericity Assumed	5281.304	883	5.981			
	Greenhouse-Geisser	5281.304	883.000	5.981			

	Huynh-Feldt	5281.304	883.000	5.981			
	Lower-bound	5281.304	883.000	5.981			
Gist * MoreLess	Sphericity Assumed	56.097	1	56.097	10.740	.001	.012
	Greenhouse-Geisser	56.097	1.000	56.097	10.740	.001	.012
	Huynh-Feldt	56.097	1.000	56.097	10.740	.001	.012
	Lower-bound	56.097	1.000	56.097	10.740	.001	.012
Gist * MoreLess * Delay Condition	Sphericity Assumed	2.672	1	2.672	.511	.475	.001
	Greenhouse-Geisser	2.672	1.000	2.672	.511	.475	.001
	Huynh-Feldt	2.672	1.000	2.672	.511	.475	.001
	Lower-bound	2.672	1.000	2.672	.511	.475	.001
Gist * MoreLess * Country	Sphericity Assumed	10.935	1	10.935	2.093	.148	.002
	Greenhouse-Geisser	10.935	1.000	10.935	2.093	.148	.002
	Huynh-Feldt	10.935	1.000	10.935	2.093	.148	.002
	Lower-bound	10.935	1.000	10.935	2.093	.148	.002
Gist * MoreLess * Delay Condition * Country	Sphericity Assumed	6.749	1	6.749	1.292	.256	.001
	Greenhouse-Geisser	6.749	1.000	6.749	1.292	.256	.001
	Huynh-Feldt	6.749	1.000	6.749	1.292	.256	.001
	Lower-bound	6.749	1.000	6.749	1.292	.256	.001
Error(Gist*MoreLess)	Sphericity Assumed	4612.191	883	5.223			
	Greenhouse-Geisser	4612.191	883.000	5.223			
	Huynh-Feldt	4612.191	883.000	5.223			
	Lower-bound	4612.191	883.000	5.223			
TargetDistractor * MoreLess	Sphericity Assumed	1261.285	1	1261.285	201.708	.000	.186
	Greenhouse-Geisser	1261.285	1.000	1261.285	201.708	.000	.186
	Huynh-Feldt	1261.285	1.000	1261.285	201.708	.000	.186
	Lower-bound	1261.285	1.000	1261.285	201.708	.000	.186
TargetDistractor * MoreLess * Delay Condition	Sphericity Assumed	112.333	1	112.333	17.965	.000	.020
	Greenhouse-Geisser	112.333	1.000	112.333	17.965	.000	.020
	Huynh-Feldt	112.333	1.000	112.333	17.965	.000	.020

	Lower-bound	112.333	1.000	112.333	17.965	.000	.020
TargetDistractor * MoreLess * Country	Sphericity Assumed	51.406	1	51.406	8.221	.004	.009
	Greenhouse-Geisser	51.406	1.000	51.406	8.221	.004	.009
	Huynh-Feldt	51.406	1.000	51.406	8.221	.004	.009
	Lower-bound	51.406	1.000	51.406	8.221	.004	.009
TargetDistractor * MoreLess * Delay Condition * Country	Sphericity Assumed	9.812	1	9.812	1.569	.211	.002
	Greenhouse-Geisser	9.812	1.000	9.812	1.569	.211	.002
	Huynh-Feldt	9.812	1.000	9.812	1.569	.211	.002
	Lower-bound	9.812	1.000	9.812	1.569	.211	.002
Error(TargetDistractor *MoreLess)	Sphericity Assumed	5521.425	883	6.253			
	Greenhouse-Geisser	5521.425	883.000	6.253			
	Huynh-Feldt	5521.425	883.000	6.253			
	Lower-bound	5521.425	883.000	6.253			
Gist * TargetDistractor * MoreLess	Sphericity Assumed	18.229	1	18.229	3.164	.076	.004
	Greenhouse-Geisser	18.229	1.000	18.229	3.164	.076	.004
	Huynh-Feldt	18.229	1.000	18.229	3.164	.076	.004
	Lower-bound	18.229	1.000	18.229	3.164	.076	.004
Gist * TargetDistractor * MoreLess * Delay Condition	Sphericity Assumed	4.213	1	4.213	.731	.393	.001
	Greenhouse-Geisser	4.213	1.000	4.213	.731	.393	.001
	Huynh-Feldt	4.213	1.000	4.213	.731	.393	.001
	Lower-bound	4.213	1.000	4.213	.731	.393	.001
Gist * TargetDistractor * MoreLess * Country	Sphericity Assumed	89.542	1	89.542	15.543	.000	.017
	Greenhouse-Geisser	89.542	1.000	89.542	15.543	.000	.017
	Huynh-Feldt	89.542	1.000	89.542	15.543	.000	.017
	Lower-bound	89.542	1.000	89.542	15.543	.000	.017
Gist * TargetDistractor * MoreLess * Delay Condition * Country	Sphericity Assumed	16.019	1	16.019	2.781	.096	.003
	Greenhouse-Geisser	16.019	1.000	16.019	2.781	.096	.003
	Huynh-Feldt	16.019	1.000	16.019	2.781	.096	.003
	Lower-bound	16.019	1.000	16.019	2.781	.096	.003
Error(Gist*TargetDistractor*MoreLess)	Sphericity Assumed	5086.918	883	5.761			
	Greenhouse-Geisser	5086.918	883.000	5.761			
	Huynh-Feldt	5086.918	883.000	5.761			

	Lower-bound	5086.918	883.000	5.761			
HighLow * MoreLess	Sphericity Assumed	293.393	1	293.393	41.579	.000	.045
	Greenhouse-Geisser	293.393	1.000	293.393	41.579	.000	.045
	Huynh-Feldt	293.393	1.000	293.393	41.579	.000	.045
	Lower-bound	293.393	1.000	293.393	41.579	.000	.045
HighLow * MoreLess * Delay Condition	Sphericity Assumed	438.894	1	438.894	62.199	.000	.066
	Greenhouse-Geisser	438.894	1.000	438.894	62.199	.000	.066
	Huynh-Feldt	438.894	1.000	438.894	62.199	.000	.066
	Lower-bound	438.894	1.000	438.894	62.199	.000	.066
HighLow * MoreLess * Country	Sphericity Assumed	1.204	1	1.204	.171	.680	.000
	Greenhouse-Geisser	1.204	1.000	1.204	.171	.680	.000
	Huynh-Feldt	1.204	1.000	1.204	.171	.680	.000
	Lower-bound	1.204	1.000	1.204	.171	.680	.000
HighLow * MoreLess * Delay Condition * Country	Sphericity Assumed	74.312	1	74.312	10.531	.001	.012
	Greenhouse-Geisser	74.312	1.000	74.312	10.531	.001	.012
	Huynh-Feldt	74.312	1.000	74.312	10.531	.001	.012
	Lower-bound	74.312	1.000	74.312	10.531	.001	.012
Error(HighLow*MoreLess)	Sphericity Assumed	6230.677	883	7.056			
	Greenhouse-Geisser	6230.677	883.000	7.056			
	Huynh-Feldt	6230.677	883.000	7.056			
	Lower-bound	6230.677	883.000	7.056			
Gist * HighLow * MoreLess	Sphericity Assumed	247.015	1	247.015	44.195	.000	.048
	Greenhouse-Geisser	247.015	1.000	247.015	44.195	.000	.048
	Huynh-Feldt	247.015	1.000	247.015	44.195	.000	.048
	Lower-bound	247.015	1.000	247.015	44.195	.000	.048
Gist * HighLow * MoreLess * Delay Condition	Sphericity Assumed	.126	1	.126	.023	.881	.000
	Greenhouse-Geisser	.126	1.000	.126	.023	.881	.000
	Huynh-Feldt	.126	1.000	.126	.023	.881	.000
	Lower-bound	.126	1.000	.126	.023	.881	.000
Gist * HighLow * MoreLess * Country	Sphericity Assumed	1.684	1	1.684	.301	.583	.000
	Greenhouse-Geisser	1.684	1.000	1.684	.301	.583	.000
	Huynh-Feldt	1.684	1.000	1.684	.301	.583	.000
	Lower-bound	1.684	1.000	1.684	.301	.583	.000
	Sphericity Assumed	25.604	1	25.604	4.581	.033	.005

Gist * HighLow * MoreLess * Delay Condition * Country	Greenhouse-Geisser	25.604	1.000	25.604	4.581	.033	.005
	Huynh-Feldt	25.604	1.000	25.604	4.581	.033	.005
	Lower-bound	25.604	1.000	25.604	4.581	.033	.005
Error(Gist*HighLow*MoreLess)	Sphericity Assumed	4935.224	883	5.589			
	Greenhouse-Geisser	4935.224	883.000	5.589			
	Huynh-Feldt	4935.224	883.000	5.589			
	Lower-bound	4935.224	883.000	5.589			
TargetDistractor * HighLow * MoreLess	Sphericity Assumed	.352	1	.352	.055	.814	.000
	Greenhouse-Geisser	.352	1.000	.352	.055	.814	.000
	Huynh-Feldt	.352	1.000	.352	.055	.814	.000
	Lower-bound	.352	1.000	.352	.055	.814	.000
TargetDistractor * HighLow * MoreLess * Delay Condition	Sphericity Assumed	331.462	1	331.462	51.970	.000	.056
	Greenhouse-Geisser	331.462	1.000	331.462	51.970	.000	.056
	Huynh-Feldt	331.462	1.000	331.462	51.970	.000	.056
	Lower-bound	331.462	1.000	331.462	51.970	.000	.056
TargetDistractor * HighLow * MoreLess * Country	Sphericity Assumed	1.821	1	1.821	.286	.593	.000
	Greenhouse-Geisser	1.821	1.000	1.821	.286	.593	.000
	Huynh-Feldt	1.821	1.000	1.821	.286	.593	.000
	Lower-bound	1.821	1.000	1.821	.286	.593	.000
TargetDistractor * HighLow * MoreLess * Delay Condition * Country	Sphericity Assumed	.464	1	.464	.073	.787	.000
	Greenhouse-Geisser	.464	1.000	.464	.073	.787	.000
	Huynh-Feldt	.464	1.000	.464	.073	.787	.000
	Lower-bound	.464	1.000	.464	.073	.787	.000
Error(TargetDistractor*HighLow*MoreLess)	Sphericity Assumed	5631.747	883	6.378			
	Greenhouse-Geisser	5631.747	883.000	6.378			
	Huynh-Feldt	5631.747	883.000	6.378			
	Lower-bound	5631.747	883.000	6.378			
Gist * TargetDistractor * HighLow * MoreLess	Sphericity Assumed	1.935	1	1.935	.356	.551	.000
	Greenhouse-Geisser	1.935	1.000	1.935	.356	.551	.000
	Huynh-Feldt	1.935	1.000	1.935	.356	.551	.000
	Lower-bound	1.935	1.000	1.935	.356	.551	.000
	Sphericity Assumed	5.974	1	5.974	1.099	.295	.001

Gist * TargetDistractor * HighLow * MoreLess * Delay Condition	Greenhouse-Geisser	5.974	1.000	5.974	1.099	.295	.001
	Huynh-Feldt	5.974	1.000	5.974	1.099	.295	.001
	Lower-bound	5.974	1.000	5.974	1.099	.295	.001
Gist * TargetDistractor * HighLow * MoreLess * Country	Sphericity Assumed	160.384	1	160.384	29.511	.000	.032
	Greenhouse-Geisser	160.384	1.000	160.384	29.511	.000	.032
	Huynh-Feldt	160.384	1.000	160.384	29.511	.000	.032
	Lower-bound	160.384	1.000	160.384	29.511	.000	.032
Gist * TargetDistractor * HighLow * MoreLess * Delay Condition * Country	Sphericity Assumed	18.066	1	18.066	3.324	.069	.004
	Greenhouse-Geisser	18.066	1.000	18.066	3.324	.069	.004
	Huynh-Feldt	18.066	1.000	18.066	3.324	.069	.004
	Lower-bound	18.066	1.000	18.066	3.324	.069	.004
Error(Gist*TargetDistractor*HighLow*MoreLess)	Sphericity Assumed	4798.900	883	5.435			
	Greenhouse-Geisser	4798.900	883.000	5.435			
	Huynh-Feldt	4798.900	883.000	5.435			
	Lower-bound	4798.900	883.000	5.435			

Tests of Between-Subjects Effects

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Intercept	70515.001	1	70515.001	1800.643	.000	.671
Delay Condition	101.561	1	101.561	2.593	.108	.003
Country	300.030	1	300.030	7.661	.006	.009
Delay Condition * Country	54.386	1	54.386	1.389	.239	.002
Error	34579.174	883	39.161			